

Comparative Study of Standards and Indicators for School Improvement (SISI) and Academic Index for Selected Elementary Schools

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Executive Summary

Purpose

This study was undertaken to more closely examine the audit/review data to determine if any information could be gleaned to clarify what separates “successful schools” from other schools.

Description of Data

Data for this study were provided by the Kentucky Department of Education. The scholastic audit/review data included the score of each audited/reviewed school on all 88 indicators. The data provided included all school audit or review reports (on file in an electronic media) that were conducted through June 2003 or the end of the 2002-2003 school year.

The data include both the results of scholastic audits conducted by KDE and reviews conducted by regional service centers, school districts, and self audits. Several teams and team leaders conducted audits, and there were even more scholastic review teams from the service centers and districts. However, according to the Kentucky Department of Education, all audit and review teams were trained in conducting audits and reviews (KDE, 2003). The primary assessment and evaluation instrument for the audits and reviews was KDE’s *Standards and Indicators for School Improvement* (KDE, 2003). While there were no reliability measures taken to assess inter-rater reliability, all teams did use a standardized instrument and received training on conducting the audits/reviews.

The audit or review teams used the data they collected in reviewing documents, observing in classrooms, and formal interviews and informal discussions with teachers, students, parents, and administrators to evaluate the school or district on each indicator. The team then agreed upon a finding and a score for each of the 88 indicators. This score was based upon their training and the descriptions provided for each indicator. The scores were determined using the following scale:

- Category 1 – Little or no development or implementation
- Category 2 – Limited development and partial implementation
- Category 3 – Fully functioning and operational level of development and implementation
- Category 4 – Exemplary level of development and implementation

In examining the descriptions for each indicator, it should be obvious that each school should ideally receive a rating of 3 if that school demonstrates that it is functioning to at least the desired level for that indicator. Only a small number of schools would be expected to be at the exemplary level of development and implementation—Category 4. Category 2 indicates that the school has taken at least some minimum amount of effort to develop and implement the activities for that indicator. While the school that receives a 2 is not at the desired level of development and implementation, there is an indication that some efforts are being made to achieve the desired level. Category 1 is the least desired level since it indicates that the school is far below

the level of development and implementation and that there is evidence that the school has shown little effort on the desired activities.

Analysis

We defined “successful schools” based on two aspects. The first aspect was a school’s academic index. A “successful school” based on Kentucky’s academic index was a school with a high academic index compared to other schools in Kentucky. We divided schools into quintiles and defined “successful schools” on this aspect as schools in the highest quintile or highest fifth. The other aspect was progress toward the school’s academic index goal. We used KDE’s classification of a school that had met or exceeded its academic index goal as a “Successful” school for this aspect.

Because of the small number of schools in the database, we made two decisions. First, we only used elementary schools. Second, we contrasted these successful elementary schools with the opposite extreme on each aspect. The contrast elementary schools based on progress were those classified as Level 3. A Level 3 school is defined as a school that did not meet its improvement goal and whose accountability index score on Commonwealth Accountability Testing System (CATS) puts it in the lowest one-third of schools that failed to meet improvement goals. In terms of academic index, we chose the lowest fifth of schools based on their academic index. However, since there were two aspects or dimensions, we chose only those schools that fell into both of the two categories. This meant we could have highest fifth/Successful schools, highest fifth/Level 3 schools, lowest fifth/Successful schools, and lowest fifth/Level 3 schools. However, there were no audited/reviewed schools in the database that were in the highest fifth/Level 3 schools category. Therefore, for this study, we compared these three groups of elementary schools on each of Kentucky’s 88 indicators for school improvement.

Since the data are rank-order (ordinal) data, the types of analyses that can be conducted are limited to nonparametric tests. Therefore, for each indicator, we conducted a series of nonparametric tests to determine if there appeared to be a significant difference in the distribution of the three groups and then to determine if there appeared to be a significant difference between any two groups. To determine if there was a difference between the three groups of schools, we conducted Kruskal-Wallis one-way analysis of variance tests. To compare any two groups of schools, we conducted two-sample Mann-Whitney tests.

Results

The analysis examined each of the 88 indicators by looking at differences among and between the following three elementary school groups:

- Lowest fifth/Level 3 schools,
- Lowest fifth/Successful schools, and
- Highest fifth/Successful schools.

Table ES1 lists the number of indicators for each standard that were significantly different based on the Kruskal-Wallis test when we compared the three groups and the Mann-Whitney Test when we compared two groups. The table shows that when comparing the three groups, 87 of the 88 indicators (98.9%) were significantly different. When we compared the lowest fifth/Successful schools with the highest fifth/Successful schools, 50 of the 88 indicators (56.8%) were significantly different. Comparing the lowest fifth/Level 3 schools to the highest fifth/Successful schools, we found that 87 of 88 indicators (98.9%) were significantly different.

Comparisons between the lowest fifth/Level 3 schools with the lowest fifth/Successful school found 59 of 88 indicators (67.0%) significantly different. In every case where there was a significant difference, it was the Successful school groups that had a higher mean rank for the ratings than the lowest fifth/Level 3 schools, and the highest fifth/Successful school group had a higher mean rank for the ratings than did the lowest fifth/Successful schools. For all but three indicator pair comparisons that were not significantly different, the mean ranks for the school groups were still higher for the highest fifth/Successful schools compared to the other two groups or the lowest fifth/Successful schools when compared to the lowest fifth/Level 3 schools group. In three comparisons, the lowest fifth/Successful schools had a slightly higher mean rank than did the highest fifth/Successful schools group. To give a further illustration of the significant comparisons, we have highlighted the comparisons in which at least two thirds (67%) of the indicators were significantly different.

Table ES1. Number of Indicators That Were Significantly Different Between the Highest Fifth/Successful Schools, Lowest Fifth/Successful Schools, and Lowest Fifth/Level 3 Schools.

	Kruskal-Wallis Test	Mann-Whitney Test		
	Three Groups	Lowest Fifth/Successful and Level 3	Lowest Fifth/Level 3 and Highest Fifth/Successful Schools	Successful/Lowest Fifth and Highest Fifth
Academic Performance Standard 1	6 of 7	1 of 7	6 of 7	4 of 7
Academic Performance Standard 2	8 of 8	3 of 8	8 of 8	6 of 8
Academic Performance Standard 3	8 of 8	2 of 8	8 of 8	8 of 8
Learning Environment Standard 4	11 of 11	7 of 11	11 of 11	11 of 11
Learning Environment Standard 5	5 of 5	3 of 5	5 of 5	5 of 5
Learning Environment Standard 6	12 of 12	11 of 12	12 of 12	4 of 12
Efficiency Standard 7	11 of 11	10 of 11	11 of 11	3 of 11
Efficiency Standard 8	10 of 10	6 of 10	10 of 10	7 of 10
Efficiency Standard 9	16 of 16	16 of 16	16 of 16	2 of 16
Total	87 of 88	59 of 88	87 of 88	50 of 88

Table ES2 shows the number of indicators with more than 50% Category 1 or 2 ratings for each of the groups of schools. As can be seen, for the lowest fifth/Level 3 assistance schools there is only one indicator (6.2.a – The school/district provides a clearly defined evaluation process) with fewer than 50% of the schools receiving a rating in Category 1 or 2. However, only 35% of the highest fifth/Successful schools had indicators with more than 50% of the schools receiving a rating in Category 1 or 2. Just under 80% of the schools in the lowest fifth that were successful had 50% of their ratings in Category 1 or 2.

Table ES2. Number of Indicators With More Than 50% Category 1 of 2 Ratings.

	Indicators With More Than 50% Category 1 or 2 Ratings		
	Highest Fifth/ Successful Schools	Lowest Fifth/ Successful Schools	Lowest Fifth/ Level 3 Schools
Academic Performance Standard 1	4 of 7	7 of 7	7 of 7
Academic Performance Standard 2	5 of 8	7 of 8	8 of 8
Academic Performance Standard 3	3 of 8	8 of 8	8 of 8
Learning Environment Standard 4	1 of 11	10 of 11	11 of 11
Learning Environment Standard 5	0 of 5	4 of 5	5 of 5
Learning Environment Standard 6	10 of 12	9 of 12	11 of 12
Efficiency Standard 7	1 of 11	6 of 11	11 of 11
Efficiency Standard 8	0 of 10	4 of 10	10 of 10
Efficiency Standard 9	7 of 16	14 of 16	16 of 16
Total	31 of 88 (35.2%)	69 of 88 (78.4%)	87 of 88 (98.9%)

Summary and Conclusion

This report shows that data from the audits and reviews conducted prior to June 2003 support the following concepts:

- All schools can improve.
- There are distinct, measurable differences between each of the three school groups
- There are areas where Successful schools, regardless of their academic indices, have similarities.
- There are areas where schools with lower academic indices have similarities regardless of their progress toward meeting their goal.

There are limitations to this study. First, it involved a small sample of schools, especially for the highest fifth/Successful group with only 11 schools. Second, the reliability of the data has not been verified. There were a large number of teams that conducted the audits and the reviews, and team composition—persons employed at the state, region, district, or school level—was different between the audits and the reviews. While all teams received training from KDE, this training was modified from one year to the next.

Differences Among the School Groups

There were significant differences between the three groups of schools for 87 of the 88 indicators. This is an initial indication that the indicators are valid measures both for school performance as measured by the academic index and school improvement as measured by a

school's progress. This analysis was conducted using only elementary schools from the extremes—highest fifth or lowest fifth, and Successful or Level 3. The sample of schools used for the analysis was small with 11, 19, and 47 schools in the three groups. However, the differences found among these groups were significant despite this small sample and the type of data available. These data support the use of the Standards and Indicators as measures of schools relative academic standing and improvement status.

Successful Schools Differences

There were significant differences in 15 indicators between the two groups of Successful schools and the Level 3 schools that also showed relatively little difference between the two groups of highest fifth and lowest fifth Successful schools. We identify these indicators because they may be indicators on which schools can focus for improvement regardless of their academic index. These are the indicators common to the extremes of the Successful schools.

Academic Index Differences

There were 7 indicators for which there were significant differences between the highest fifth/Successful schools group and both of the other schools groups, and very similar ratings between both groups of schools in the lowest fifth. There were other indicators in which there were significant differences between all three groups of schools, but these 7 were identified because of the similarities between the lowest fifth schools from both groups. These were the indicators that were the most different between the highest fifth and the lowest fifth, regardless of whether or not a school was improving.

Standards and Indicators of School Improvement (SISI) and Academic Index for Selected Elementary Schools

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Standards and Indicators for School Improvement (SISI) and Academic Index for Selected Elementary Schools

Introduction

With the passage of KRS 158.6455 in 1998, the General Assembly charged the Kentucky Board of Education with two tasks:

- Adopting administrative regulations to establish consequences for schools whose assessment fell below their assistance line (Section 3), and
- Establishing guidelines for conducting scholastic audits (Section 4).

In response, the Kentucky Department of Education (KDE) developed the *Standards and Indicators for School Improvement (2003)* as a workbook to be used “to identify opportunities for improvement and help develop plans for maximizing those opportunities.” This document provided 88 indicators divided between nine standards that covered academic performance, learning environment, and efficiency to assess a school’s current status.

KDE also established guidelines for conducting scholastic audits. First, KDE established a classification system for all schools with an academic index below the assistance line. These schools were divided into three categories. The lowest one-third were classified as Level 3 and were required to be audited. KDE established the make-up of scholastic audit teams as a parent, teacher, school administrator, district administrator, university faculty member, and a Highly Skilled Educator. The middle third of these schools were classified as Level 2 and were to receive a scholastic review. The scholastic review teams were to be composed of two representatives from the regional service center and two to four representatives from the school’s district. Schools in the top third of the schools below the assistance line were classified as Level 1 and were to conduct a self-review. Additionally, KDE required that a small sample of schools that had met or exceeded their goals—successful schools—were to receive a review.

KDE began conducting scholastic audits or reviews during the 2000-2001 school year. KDE reported conducting 131 (83 elementary schools, 28 middle schools, and 20 high schools) scholastic audits or reviews during the 2000-2001 school year and a further 141 during the 2002-2003 school year. Because the regulation required a small percentage of successful schools to receive a review, a small sample of 42 of these schools received a review since the 2000-2001 school year.

Purpose of Study

This study was undertaken to more closely examine audit/review data to determine if any information could be gleaned to clarify what separates “successful schools” from other schools. We defined “successful schools” based on two aspects. The first aspect was a school’s academic index. A “successful school” based on Kentucky’s academic index was a school with a high academic index compared to other schools in Kentucky. We divided schools into quintiles and defined “successful schools” on this aspect as schools in the highest quintile or highest fifth. The other aspect was progress toward the school’s academic index goal. We used KDE’s classification of a school that had met or exceeded its academic index goal as a “successful” school for this aspect.

Because of the small number of schools in the database, we contrasted these successful schools with the opposite extreme on each aspect. The contrast schools based on progress were those classified as Level 3. In terms of academic index, we chose the lowest fifth of schools based on their academic index. However, since there were two aspects or dimensions, we chose only those schools that fell into both of the two categories. This meant we could have highest fifth/Successful schools, highest fifth/Level 3 schools, lowest fifth/Successful schools, and lowest fifth/Level 3 schools. However, there were no audited/reviewed schools in the database that were in the highest fifth/Level 3 schools category. Therefore, for this study, we compared these three groups of schools on each of Kentucky's 88 indicators for school improvement.

Description of Data

Data for this study were provided by the Kentucky Department of Education. The scholastic audit/review data included the score of each audited/reviewed school on all 88 indicators. The data provided included all school audit or review reports (on file in an electronic media) that were conducted through June 2003 or the end of the 2002-2003 school year.

Table 1 illustrates the distribution of elementary schools that received an audit or review during the 2000-01, 2001-02, or 2002-03 school years in terms of their academic index and performance level. The table is divided into quintiles (highest 20%, second highest 20%, middle 20%, next to lowest 20%, and lowest 20%) by rows and performance levels (Successful, Progressing, Level 1, 2, or 3) by columns. Quintiles were determined based on all elementary school scores for that year, not just those audited or reviewed. It should be noted that the cutpoint for every quintile rose each year.

The distribution of schools shows the number of audited/reviewed schools in each category, based on their academic index in the year prior to receiving audits or reviews, since that was the year that triggered the audit or review. Cells contain both a number and a percentage. The number represents the total number of audited/reviewed elementary schools that fit that particular cell's characteristics; the percentage is obtained by dividing that number by the total number of audited/reviewed elementary schools.

The number of elementary schools may vary from the actual number of elementary schools that received audits or reviews because of the grade levels at the school. For example, schools that contained only fourth or only fifth grade are not included in the table. The table does show that more schools (about 53%) in the lowest quintile received a review/audit than did schools in the upper quintiles.

This report will focus on the three shaded cells—lowest fifth/Level 3, lowest fifth/Successful, and highest fifth/Successful. They were chosen because they should show the greatest contrast both in academic index and in progress toward the school's goal.

Table 1. Elementary Schools - Performance Level by Academic Index Score Quintile

Academic Index Quintile	Performance Level					Number of Schools
	Level 3	Level 2	Level 1	Progressing	Successful	
Highest Fifth (Highest 20%)			1 (0.6%)		11 (6.8%)	12 (7.5%)
Second Highest Fifth (60-80%)			3 (1.9%)	1 (0.6%)	10 (6.2%)	14 (8.7%)
Middle Fifth (40-60%)			9 (5.6%)	2 (1.2%)	9 (5.6%)	20 (12.4%)
Second Lowest Fifth (20-40%)		5 (3.1%)	6 (3.7%)	10 (6.2%)	9 (5.6%)	30 (18.6%)
Lowest Fifth (Lowest 20%)	47 (29.2%)	14 (8.7%)		5 (3.1%)	19 (11.8%)	85 (52.8%)
Total	47 (29.2%)	19 (11.8%)	19 (11.8%)	18 (11.2%)	58 (36.0%)	161 (100%)

The data include both the results of scholastic audits conducted by KDE and reviews conducted by regional service centers, school districts, and self audits. Several teams and team leaders conducted audits, and there were even more scholastic review teams from the service centers and districts. However, according to the Kentucky Department of Education, all audit and review teams were trained in conducting audits and reviews (KDE, 2003). The primary assessment and evaluation instrument for the audits and reviews was KDE's *Standards and Indicators for School Improvement* (KDE, 2003). While there were no reliability measures taken to assess inter-rater reliability, all teams did use a standardized instrument and received training on conducting the audits/reviews.

The audit or review teams used the data they collected in reviewing documents, observing in classrooms, and formal interviews and informal discussions with teachers, students, parents, and administrators to evaluate the school or district on each indicator. The team then agreed upon a finding and a score for each of the 88 indicators. This score was based upon their training and the descriptions provided for each indicator. The scores were determined using the following scale:

- Category 1 – Little or no development or implementation
- Category 2 – Limited development and partial implementation
- Category 3 – Fully functioning and operational level of development and implementation
- Category 4 – Exemplary level of development and implementation

In examining the descriptions for each indicator, it should be obvious that each school should ideally receive a rating of 3 if that school demonstrates that it is functioning to at least the desired level for that indicator. Only a small number of schools would be expected to be at the exemplary level of development and implementation—Category 4. Category 2 indicates that the school has taken at least some minimum amount of effort to develop and implement the activities for that indicator. While the school that receives a 2 is not at the desired level of development and implementation, there is an indication that some efforts are being made to achieve the desired level. Category 1 is the least desired level since it indicates that the school is far below the level of development and implementation and that there is evidence that the school has shown little effort on the desired activities.

Analysis

Since the data are rank-order (ordinal) data, the types of analyses that can be conducted are limited to nonparametric tests. Therefore, for each indicator, we conducted a series of nonparametric tests to determine if there appeared to be a significant difference in the distribution of the three groups and then to determine if there appeared to be a significant difference between any two groups. To determine if there was a difference between the three groups of schools, we conducted Kruskal-Wallis one-way analysis of variance tests. To compare any two groups of schools, we conducted two-sample Mann-Whitney tests.

Both the Kruskal-Wallis and the Mann-Whitney tests are calculated following a similar procedure. For the Mann-Whitney tests, all cases from the two groups are combined and arranged in rank order. For ties (in this case, several schools receiving a rating of 2), an average rank is assigned to all schools with that rating. For the Kruskal-Wallis test, all cases from all groups (in this case, there were three groups) are combined and rank ordered. For both tests, the ranks (or average ranks) for each group are then summed. The results for these tests are described for each of the indicators.

Figure 1 shows the change in academic index scores from 2001 to 2003 for those elementary schools that were audited or reviewed prior to the end of school year 2000-2001. Schools that were reviewed or audited after this period were not included because it was felt that these schools would not have had time to implement changes as a result of the audit or review that would have been reflected in the school's academic index. The figure shows that the majority of the schools that received an audit or review improved their scores after the audit/review. The figure also shows the largest gains were recorded for the schools with an academic index score of less than 60. While this information is interesting, it does not show causation since no investigation was conducted to determine whether any changes in instruction or other areas that could have resulted in students scoring higher on the KCCT were influenced or caused by the audits/reviews. Additionally, no follow-up of the audit/reviews was conducted for this report to determine if any change in any of the 88 indicators has occurred within any of the schools.

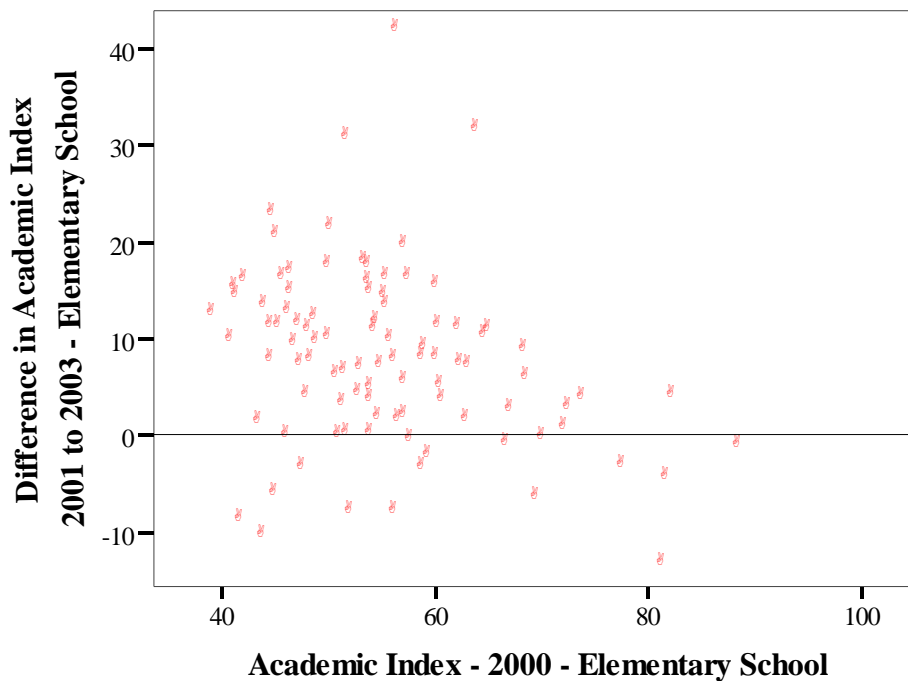


Figure 1. Difference in academic index scores from 2001 to 2003 for elementary schools audited or reviewed before June 2001.

As shown in Table 1, the analysis examined each of the 88 indicators by looking at differences among and between the following three elementary school groups:

- Lowest fifth/Level 3 schools,
- Lowest fifth/Successful schools, and
- Highest fifth/Successful schools.

In Table 2, we list the number of indicators for each standard that were significantly different¹ based on the Kruskal-Wallis test when we compared the three groups and the Mann-Whitney Test when we compared two groups. The table shows that when comparing the three groups, 87 of the 88 indicators (98.9%) were significantly different. When we compared the lowest fifth/Successful schools with the highest fifth/Successful schools, 50 of the 88 indicators (56.8%) were significantly different. Comparing the lowest fifth/Level 3 schools to the highest fifth/Successful schools, we found that 87 of 88 indicators (98.9%) were significantly different. Comparisons between the lowest fifth/Level 3 schools with the lowest fifth/Successful school found 59 of 88 indicators (67.0%) significantly different. In every case where there was a

¹ By significantly different, we mean that there was less than a 5% probability ($p < 0.05$) that the two groups were the same for the criteria that were measured. Actual probabilities from the Kruskal-Wallis and Mann-Whitney tests are provided when each indicator is discussed.

significant difference, it was the Successful school groups that had a higher mean rank for the ratings than the lowest fifth/Level 3 schools, and the highest fifth/Successful school group had a higher mean rank for the ratings than did the lowest fifth/Successful schools. For all but three indicator pair comparisons that were not significantly different, the mean ranks for the school groups were still higher for the highest fifth/Successful schools compared to the other two groups or the lowest fifth/Successful schools when compared to the lowest fifth/Level 3 schools group. In three comparisons, the lowest fifth/Successful schools had a slightly higher mean rank than did the highest fifth/Successful schools group. To give a further illustration of the significant comparisons, we have highlighted the comparisons in Table 2 in which at least two thirds (67%) of the indicators were significantly different.

Table 2. Number of Indicators That Were Significantly Different Between the Highest Fifth/Successful Schools, Lowest Fifth/Successful Schools, and Lowest Fifth/Level 3 Schools.

	Kruskal-Wallis Test	Mann-Whitney Test		
	Three Groups	Lowest Fifth/Level 3 and Lowest Fifth/Successful Schools	Lowest Fifth/Level 3 and Highest Fifth/Successful Schools	Lowest Fifth/Successful and Highest Fifth/Successful Schools
Academic Performance Standard 1 Curriculum	6 of 7	1 of 7	6 of 7	4 of 7
Academic Performance Standard 2 Classroom Evaluation/Assessment	8 of 8	3 of 8	8 of 8	6 of 8
Academic Performance Standard 3 Instruction	8 of 8	2 of 8	8 of 8	8 of 8
Learning Environment Standard 4 School Culture	11 of 11	7 of 11	11 of 11	11 of 11
Learning Environment Standard 5 Student, Family, and Community	5 of 5	3 of 5	5 of 5	5 of 5
Learning Environment Standard 6 Professional Growth, Development, and Evaluation	12 of 12	11 of 12	12 of 12	4 of 12
Efficiency Standard 7 Leadership	11 of 11	10 of 11	11 of 11	3 of 11
Efficiency Standard 8 Organization Structure and Resources	10 of 10	6 of 10	10 of 10	7 of 10
Efficiency Standard 9 Comprehensive and Effective Planning	16 of 16	16 of 16	16 of 16	2 of 16
Total	87 of 88	59 of 88	87 of 88	50 of 88

Table 3 shows the number of indicators with more than 50% Category 1 or 2 ratings for each of the groups of schools. As can be seen, for the lowest fifth/Level 3 assistance schools there is only one indicator (6.2.a – The school/district provides a clearly defined evaluation process) with fewer than 50% of the schools receiving a rating in Category 1 or 2. However, only 35% of the highest fifth/Successful schools had indicators with more than 50% of the schools receiving a rating in Category 1 or 2. Just under 80% of the schools in the lowest fifth that were successful had 50% of their ratings in Category 1 or 2.

Table 3. Number of Indicators With More Than 50% Category 1 of 2 Ratings.

	Indicators With More Than 50% Category 1 or 2 Ratings		
	Highest Fifth/ Successful Schools	Lowest Fifth/ Successful Schools	Lowest Fifth/ Level 3 Schools
Academic Performance Standard 1 Curriculum	4 of 7	7 of 7	7 of 7
Academic Performance Standard 2 Classroom Evaluation/Assessment	5 of 8	7 of 8	8 of 8
Academic Performance Standard 3 Instruction	3 of 8	8 of 8	8 of 8
Learning Environment Standard 4 School Culture	1 of 11	10 of 11	11 of 11
Learning Environment Standard 5 Student, Family, and Community	0 of 5	4 of 5	5 of 5
Learning Environment Standard 6 Professional Growth, Development, and Evaluation	10 of 12	9 of 12	11 of 12
Efficiency Standard 7 Leadership	1 of 11	6 of 11	11 of 11
Efficiency Standard 8 Organization Structure and Resources	0 of 10	4 of 10	10 of 10
Efficiency Standard 9 Comprehensive and Effective Planning	7 of 16	14 of 16	16 of 16
Total	31 of 88 (35.2%)	69 of 88 (78.4%)	87 of 88 (98.9%)

The following analysis and discussion will first discuss and present the results in table form showing the total number of ratings for each category for the three groups of schools. Following this, there is a discussion and table showing the significance level of differences between the three groups and of differences between each group by indicator within the standard.

Academic Performance Standard 1 – Curriculum

Table 4 shows the total number of ratings—all seven indicators in Academic Performance Standard 1—for each category for the three groups of interest. The table shows vividly that the audits and reviews found that the highest fifth/Successful schools are outperforming both of the other groups in developing and implementing a rigorous curriculum that is aligned to state and local standards. For these highest fifth/Successful schools, more than 50% of their ratings fell in the highest two categories (Category 3 - fully functioning and operational or Category 4 - exemplary development and implementation) as opposed to just over 10% for both of the other two school groupings. The table also shows that the lowest fifth/Successful schools did receive slightly higher ratings than the lowest fifth/Level 3 schools. However, both of these groups were shown to need far more work in the area of curriculum since almost 90% of the ratings for each group were in the lowest two categories (Category 1 - little or no development or implementation or Category 2 – limited development or partial implementation). Unfortunately, even the highest fifth/Successful schools had more than 40% of their ratings in Category 2 and a further 4% in Category 1.

Table 4. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Academic Performance Standard 1 - Curriculum

Performance Level	Academic Performance Standard 1 - Curriculum				Total
	1	2	3	4	
Highest Fifth/ Successful	3 (3.9%)	33 (42.9%)	32 (41.6%)	9 (11.7%)	77
Lowest Fifth/ Successful	35 (26.3%)	81 (60.9%)	17 (12.8%)	0	133
Lowest Fifth/ Level 3	131 (39.8%)	163 (49.5%)	35 (10.6%)	0	329
Total	169 (31.4%)	277 (51.4%)	84 (15.6%)	9 (1.7%)	539

Table 5. Significant Level of Differences Between Elementary School Groups for Indicators in Academic Performance Standard 1 – Curriculum.

	All Groups	Lowest Fifth/Level 3 and Lowest Fifth/Successful	Lowest Fifth/Level 3 and Highest Fifth/Successful	Lowest Fifth/Successful and Highest Fifth/Successful
Indicator 1.1.a	0.012		0.003	0.031
Indicator 1.1.b				
Indicator 1.1.c	0.040		0.018	
Indicator 1.1.d	0.001		0.000	0.007
Indicator 1.1.e	0.000		0.000	0.000
Indicator 1.1.f	0.018		0.007	
Indicator 1.1.g	0.000	0.017	0.000	0.000
Total	6 of 7	1 of 7	6 of 7	4 of 7

All values are probability values (p) of the groups having the same distribution. Only probabilities less than 0.05 are shown.

Indicator 1.1.a – Curriculum is Aligned with State Standards

In examining Table 6, it appears that there are differences between the highest fifth/Successful schools and both of the other groups. For the highest-fifth/Successful schools, about 55% are in the highest two rating categories—Category 3 - fully functioning and operational level of development and implementation and Category 4 - exemplary level of development and implementation. The other two groups, on the other hand, are clustered in the lowest two category ratings, with 79% to 85%, and only 15% to 21% in Category 3. Examining the percentages of schools for the lowest fifth schools within each rating category shows little difference between Successful schools and Level 3 schools. For indicator 1.1.a, the difference between the three groups was significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77) = 8.834, p = 0.012$. However, when we examined the difference between any two groups, we found the only significant differences were between the highest fifth/Successful schools and both of the other two groups. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.76, N_2 = 19, M_{rank2} = 35.34) = 411.500, z = -0.587, p = 0.557$; $U(N_1 = 47, M_{rank1} = 26.77, N_3 = 11, M_{rank3} = 44.18) = 130.000, z = -2.946, p = 0.003$; and $U(N_2 = 19, M_{rank2} = 13.16, N_3 = 11, M_{rank3} = 19.55) = 60.000, z = -2.153, p = 0.031$. The ratings for this indicator appear to point out that the difference between highest fifth and lowest fifth elementary schools is more pronounced than the difference between Level 3 schools and successful schools. Unfortunately, these results also show that this area still requires considerably more attention by all levels of elementary schools.

Table 6. Quintile and Performance Level by Academic Performance Standard 1.1.a

Performance Level	1.1.a – There is evidence that the curriculum is aligned with <i>Academic Expectations, Core Content for Assessment, Transformations, and the Program of Studies.</i>				Number of schools
	1	2	3	4	
Highest Fifth/ Successful	0	5 (45.5%)	5 (45.5%)	1 (9.1%)	11
Lowest Fifth/ Successful	3 (15.8%)	12 (63.2%)	4 (21.1%)	0	19
Lowest Fifth/Level 3	9 (19.1%)	31 (66.0%)	7 (14.9%)	0	47
Total	12 (15.6%)	48 (62.3%)	18 (23.4%)	1 (1.3%)	77

Indicator 1.1.b – Curriculum Standards are Articulated Across Levels (P-12)

An examination of Table 7 shows that about 75% of all schools receiving an audit or review were rated as being in one of the lower two ratings—both of which indicate substantial work is still required. This also is the only indicator where there is not a significant difference between any of the school groups. The differences that can be seen are that no successful school in the highest fifth was rated in the lowest category and that this group was the only one with any exemplary schools. Note that both successful and assistance schools in the lowest fifth have almost identical percentages of schools in all rating categories. An additional point to notice is that this is an indicator that is used for assessing district accountability. For a high rating on this indicator, both the school and the district must make efforts to ensure that there is coordination with other schools in the district. Since these are all elementary schools, this coordination would be with the receiving middle school(s). The results of the Kruskal-Wallis test were $\chi^2(2, N = 77) = 3.353, p = 0.836$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.27, N_2 = 19, M_{rank2} = 34.08) = 435.500, z = -0.172, p = 0.864$; $U(N_1 = 47, M_{rank1} = 27.76, N_3 = 11, M_{rank3} = 36.95) = 176.500, z = -1.819, p = 0.069$; and $U(N_2 = 19, M_{rank2} = 13.89, N_3 = 11, M_{rank3} = 18.27) = 74.000, z = -1.491, p = 0.136$.

Table 7. Quintile and Performance Level by Academic Performance Standard 1.1.b

Performance Level	1.1.b – The district initiates and facilitates discussions among schools regarding curriculum standards to ensure they are clearly articulated across all levels (P-12).				Number of schools
	1	2	3	4	
Highest Fifth/Successful	0	8 (72.7%)	1 (9.1%)	2 (18.2%)	11
Lowest Fifth/Successful	5 (26.3%)	10 (52.6%)	4 (21.1%)	0	19
Lowest Fifth/Level 3	13 (27.7%)	25 (53.2%)	9 (19.1%)	0	47
Total	18 (23.4%)	43 (55.8%)	14 (18.2%)	2 (2.6%)	77

Indicator 1.1.c – Unnecessary Overlaps and Gaps are Eliminated

The only significant difference for this indicator is between the highest fifth/Successful schools and the lowest fifth/Level 3 schools. Examining Table 8, we see that for all three groups of schools less than 50% of schools in every group are in Categories 1 and 2. However, both of the lowest fifth school groups have almost 80% of the schools in the lowest two categories. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.97, N_2 = 19, M_{rank2} = 41.55, N_3 = 11, M_{rank3} = 51.82) = 6.449, p = 0.040$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.81, N_2 = 19, M_{rank2} = 37.68) = 367.000, z = -1.242, p = 0.214$; $U(N_1 = 47, M_{rank1} = 27.16, N_3 = 11, M_{rank3} = 39.50) = 148.500, z = -2.359, p = 0.018$; and $U(N_2 = 19, M_{rank2} = 13.87, N_3 = 11, M_{rank3} = 18.32) = 73.500, z = -1.488, p = 0.137$.

Table 8. Quintile and Performance Level by Academic Performance Standard 1.1.c

Performance Level	1.1.c – The district initiates and facilitates discussions between schools in the district in order to eliminate unnecessary overlaps and close gaps.				Number of schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	5 (45.5%)	3 (27.2%)	2 (18.2%)	11
Lowest Fifth/Successful	3 (15.8%)	12 (63.2%)	4 (21.1%)		19
Lowest Fifth/Level 3	16 (34.0%)	23 (48.9%)	8 (17.0%)		47
Total	20 (26.0%)	40 (51.9%)	15 (19.5%)	2 (2.6%)	77

Indicator 1.1.d – Vertical Communication Focused on Key Curriculum Transition Points

Table 9 shows that the highest fifth/Successful school group is significantly more highly rated than either of the other two groups of schools. Additionally, 95% or more of the schools in the other two groups are rated in Categories 1 or 2, while only 55% of the highest fifth/Successful schools are rated in these two categories. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.82, N_2 = 19, M_{rank2} = 39.82, N_3 = 11, M_{rank3} = 59.73) = 14.775, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.95, N_2 = 19, M_{rank2} = 37.34) = 373.500, z = -1.181, p = 0.238$; $U(N_1 = 47, M_{rank1} = 25.87, N_3 = 11, M_{rank3} = 45.00) = 88.000, z = -3.743, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.47, N_3 = 11, M_{rank3} = 20.73) = 47.000, z = -2.693, p = 0.007$.

Table 9. Quintile and Performance Level by Academic Performance Standard 1.1.d

Performance Level	1.1.d – There is evidence of vertical communication with an intentional focus on key curriculum transition points within grade configurations (e.g., from primary to middle and middle to high).				Number of schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	5 (45.5%)	4 (36.4%)	1 (9.1%)	11
Lowest Fifth/Successful	8 (42.1%)	10 (52.6%)	1 (5.3%)		19
Lowest Fifth/Level 3	27 (57.4%)	19 (40.4%)	1 (2.1%)		47
Total	36 (46.8%)	34 (44.2%)	6 (7.8%)	1 (1.3%)	77

Indicator 1.1.e – Curriculum Provides Links to Continuing Education, Life, and Career Options

This indicator shows an extremely large gap between the highest fifth/Successful schools and the other two groups. In Table 10, over 90% of the schools of the highest fifth/Successful schools are rated Category 3 or 4, while approximately 95% of the lowest fifth schools are rated in Category 1 or 2. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.86, N_2 = 19, M_{rank2} = 34.71, N_3 = 11, M_{rank3} = 68.36) = 26.160, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 33.24, N_2 = 19, M_{rank2} = 34.13) = 434.500, z = -0.193, p = 0.847$; $U(N_1 = 47, M_{rank1} = 24.62, N_3 = 11, M_{rank3} = 50.36) = 29.000, z = -4.891, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 10.58, N_3 = 11, M_{rank3} = 24.00) = 11.000, z = -4.272, p = 0.000$.

Table 10. Quintile and Performance Level by Academic Performance Standard 1.1.e

Performance Level	1.1.e – The school curriculum provides specific links to continuing education, life, and career options.				Number of schools
	1	2	3	4	
Highest Fifth/ Successful		1 (9.1%)	9 (81.8%)	1 (9.1%)	11
Lowest Fifth/ Successful	7 (36.8%)	11 (57.9%)	1 (5.3%)		19
Lowest Fifth/ Level 3	19 (40.4%)	25 (53.2%)	3 (6.4%)		47
Total	26 (33.8%)	37 (48.1%)	13 (16.9%)	1 (1.3%)	77

Indicator 1.1.f – Systematic Process for Monitoring, Evaluating, and Reviewing the Curriculum

Table 11 shows that most schools in the three groups were rated in the first two categories—approximately 70% of the highest fifth/Successful schools, 95% of the lowest fifth/Successful schools, and 90% of the lowest fifth/Level 3 schools. However, the highest fifth/Successful schools were still found to be rated significantly higher than the other two groups of schools. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.76, N_2 = 19, M_{rank2} = 40.92, N_3 = 11, M_{rank3} = 53.82) = 8.070, p = 0.018$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.90, N_2 = 19, M_{rank2} = 37.45) = 371.500, z = -1.179, p = 0.238$; $U(N_1 = 47, M_{rank1} = 26.85, N_3 = 11, M_{rank3} = 40.82) = 134.000, z = -2.698, p = 0.007$; and $U(N_2 = 19, M_{rank2} = 13.47, N_3 = 11, M_{rank3} = 19.00) = 66.000, z = -1.935, p = 0.053$.

Table 11. Quintile and Performance Level by Academic Performance Standard 1.1.f

Performance Level	1.1.f – There is in place a systematic process for monitoring, evaluating, and reviewing the curriculum.				Number of schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	7 (63.6%)	2 (18.2%)	1 (9.1%)	11
Lowest Fifth/ Successful	6 (31.6%)	12 (63.2%)	1 (5.3%)		19
Lowest Fifth/ Level 3	25 (53.2%)	17 (36.2%)	5 (10.6%)		47
Total	32 (41.6%)	36 (46.8%)	8 (10.4%)	1 (1.3%)	77

Indicator 1.1.g – Curriculum Provides Access to a Common Academic Core for all Students

In Table 12, there again appears to be a large gap between the highest fifth/Successful schools and the other two school groups. Over 80% of the highest fifth/Successful schools were rated in the top two categories, while approximately 90% of the lowest fifth/Successful schools and more than 95% of the lowest fifth/Level 3 schools received ratings in the lowest two categories. However, there is also a significant difference between the two groups of schools in the lowest fifth. Almost 74% of the lowest fifth/Successful schools were rated in Category 2, while only about 49% of the Level 3 schools received this rating and about 47% of these schools received the lowest rating of 1. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.11, N_2 = 19, M_{rank2} = 42.63, N_3 = 11, M_{rank3} = 66.45) = 27.539, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.36, N_2 = 19, M_{rank2} = 41.26) = 299.000, z = -2.281, p = 0.017$; $U(N_1 = 47, M_{rank1} = 24.74, N_3 = 11, M_{rank3} = 49.82) = 35.000, z = -4.779, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.37, N_3 = 11, M_{rank3} = 22.64) = 26.000, z = -3.751, p = 0.000$.

Table 12. Quintile and Performance Level by Academic Performance Standard 1.1.g

Performance Level	1.1.g – The curriculum provides access to a common academic core for all students.				Number of schools
	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	8 (72.7%)	1 (9.1%)	11
Lowest Fifth/Successful	3 (15.8%)	14 (73.7%)	2 (10.5%)		19
Lowest Fifth/Level 3	22 (46.8%)	23 (48.9%)	2 (4.3%)		47
Total	25 (32.5%)	39 (50.6%)	12 (15.6%)	1 (1.3%)	77

Academic Performance Standard 2 – Classroom Evaluation/Assessment

Table 13 shows the total number of ratings—all eight indicators in Academic Performance Standard 2—for each category for the three groups of interest. The table shows vividly that the audits/reviews found that the highest fifth/Successful schools are outperforming both of the other groups in using multiple evaluation and assessment strategies to monitor student work and modify instruction to meet their students' needs and to support proficient work. The table shows that almost 50% of the highest fifth/Successful schools have fully implemented these programs compared with 15% for the lowest fifth/Successful schools and 5% of the lowest fifth/Level 3 schools. The table also shows that the audits/reviews found that almost half of the lowest fifth/Level 3 schools have made little or no progress toward achieving the results expected.

Table 13. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Academic Performance Standard 2 – Classroom Evaluation/Assessment

Performance Level	Academic Performance Standard 2 – Classroom Evaluation/Assessment				Total
	1	2	3	4	
Highest Fifth/Successful	6 (6.8%)	39 (44.3%)	37 (42.0%)	6 (6.8%)	88
Lowest Fifth/Successful	42 (27.6%)	88 (57.9%)	22 (14.5%)	0	152
Lowest Fifth/Level 3	175 (46.5%)	182 (48.4%)	19 (5.1%)	0	376
Total	223 (36.2%)	309 (50.2%)	78 (12.7%)	6 (1.0%)	616

Table 14 shows that there is a significant difference in the ratings between the highest fifth/Successful schools and the lowest fifth/Level 3 schools in all 8 indicators. There also is a significant difference in 6 of 8 of the indicators between the highest fifth/Successful schools and the lowest fifth/Successful schools. However, there was a significant difference in only 3 of the 8 indicators between the two groups in the lowest fifth.

Table 14. Significance Level of Differences Between Elementary School Groups for Indicators in Academic Performance Standard 2 – Classroom Evaluation/Assessment.

	All Groups	Lowest Fifth/ Level 3 and Lowest Fifth/ Successful	Lowest Fifth/ Level 3 and Highest Fifth/ Successful	Lowest Fifth/ Successful and Highest Fifth/ Successful
Indicator 2.1.a	0.000		0.000	0.001
Indicator 2.1.b	0.000		0.000	0.002
Indicator 2.1.c	0.000		0.000	0.004
Indicator 2.1.d	0.000	0.006	0.000	
Indicator 2.1.e	0.001		0.000	0.004
Indicator 2.1.f	0.002		0.001	0.020
Indicator 2.1.g	0.000	0.000	0.001	
Indicator 2.1.h	0.000	0.013	0.001	0.035
Total	8 of 8	3 of 8	8 of 8	6 of 8

Indicator 2.1.a – Classroom Assessments Aligned With Kentucky’s Core Content

Table 15 shows that only 1 of the 66 lowest fifth elementary schools that were reviewed/audited had fully implemented the focal areas of this indicator. For the highest fifth/Successful schools, fewer than half were rated as having fully implemented this indicator. The three groups were shown to be significantly different. The highest fifth/Successful school group was found to have received significantly higher ratings than either of the other two groups. However, while the lowest fifth/Successful school group had a higher mean rating than the lowest fifth/Level 3 schools group, this difference was not found to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.95, N_2 = 19, M_{rank2} = 39.16, N_3 = 11, M_{rank3} = 60.32) = 16.467, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.11, N_2 = 19, M_{rank2} = 36.95) = 381.000, z = -1.091, p = 0.275$; $U(N_1 = 47, M_{rank1} = 25.84, N_3 = 11, M_{rank3} = 45.14) = 86.500, z = -3.838, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.21, N_3 = 11, M_{rank3} = 21.18) = 42.000, z = -3.226, p = 0.001$.

Table 15. Quintile and Performance Level by Academic Performance Standard 2.1.a

Performance Level	2.1.a – Classroom assessments of students’ learning are frequent, rigorous, and aligned with Kentucky’s core content.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		6 (54.5%)	5 (45.5%)		11
Lowest Fifth/Successful	5 (26.3%)	14 (73.7%)			19
Lowest Fifth/Level 3	20 (42.6%)	26 (55.3%)	1 (2.1%)		47
Total	25 (32.5%)	46 (59.7%)	6 (7.8%)	0	77

Indicator 2.1.b – Authentic Assessments Aligned with Core Content Subject Matter

Almost all schools were rated in the lower two rating categories for this indicator with only 4 (all highest fifth/Successful schools) receiving a Category 3 (fully implemented) rating. In fact, over half of the lowest fifth/Level 3 schools were rated as having little or no evidence of teachers collaborating in the design of assessment tasks aligned with core content. For this indicator, the highest fifth/Successful schools group was rated significantly higher than were the other two groups. As seen in the table, successful schools in the lowest fifth were rated higher than the Level 3 schools, but the difference was not great enough to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.09, N_2 = 19, M_{rank2} = 40.97, N_3 = 11, M_{rank3} = 60.86) = 18.045, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.45, N_2 = 19, M_{rank2} = 38.58) = 350.000, z = -1.581, p = 0.114$; $U(N_1 = 47, M_{rank1} = 25.64, N_3 = 11, M_{rank3} = 46.00) = 77.000, z = -4.038, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.39, N_3 = 11, M_{rank3} = 20.86) = 45.500, z = -3.048, p = 0.002$.

Table 16. Quintile and Performance Level by Academic Performance Standard 2.1.b

Performance Level	2.1.b. – Teachers collaborate in the design of authentic assessment tasks aligned with core content subject matter.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		7 (63.6%)	4 (36.4%)		11
Lowest Fifth/ Successful	6 (31.6%)	13 (68.4%)			19
Lowest Fifth/ Level 3	25 (53.2%)	22 (46.8%)			47
Total	31 (40.3%)	42 (54.5%)	4 (5.2%)	0	77

Indicator 2.1.c – Students Know Academic Expectations and What is Required to be Proficient

Table 17 shows that in only 36% of the highest fifth/Successful schools, the audit/review teams rated the schools as fully implementing procedures to ensure students could articulate academic expectations and knew what was required to be proficient. However, the audit/review teams rated that highly only 1 of the 66 schools in the lowest fifth. In the lowest fifth/Level 3 schools, the audit/review teams rated almost 70% of the schools in Category 1—little or no development or implementation. The highest fifth/Successful schools were rated significantly higher than both other groups. The lowest fifth/Successful schools were rated higher than the Level 3 schools, but this difference was not enough to be significantly higher. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.35, N_2 = 19, M_{rank2} = 40.45, N_3 = 11, M_{rank3} = 60.64) = 17.166, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.64, N_2 = 19, M_{rank2} = 38.11) = 359.000, z = -1.468, p = 0.142$; $U(N_1 = 47, M_{rank1} = 25.71, N_3 = 11, M_{rank3} = 45.68) = 80.500, z = -4.011, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.34, N_3 = 11, M_{rank3} = 20.95) = 44.500, z = -2.867, p = 0.004$.

Table 17. Quintile and Performance Level by Academic Performance Standard 2.1.c

Performance Level	2.1.c – Students can articulate the academic expectations in each class and know what is required to be proficient.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	6 (54.5%)	3 (27.3%)	1 (9.1%)	11
Lowest Fifth/ Successful	9 (47.4%)	10 (52.6%)			19
Lowest Fifth/ Level 3	32 (68.1%)	14 (29.8%)	1 (2.1%)		47
Total	42 (54.5%)	30 (39.0%)	4 (5.2%)	1 (1.3%)	77

Indicator 2.1.d – Use of Test Scores to Identify Curriculum Gaps

Both groups of successful schools were rated significantly higher than the Level 3 schools for this indicator. Table 18 shows that the highest fifth/Successful schools group's ratings were higher than the successful schools group in the lowest fifth; this difference was not enough to be significant. While about 45% of the highest fifth/Successful schools were rated in Category 3, only 26% of the successful schools in the lowest fifth were given the same rating for this indicator, and just over 6% of the schools in the lowest fifth/Level 3 group were in this category. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.78, N_2 = 19, M_{rank2} = 46.61, N_3 = 11, M_{rank3} = 56.73) = 16.452, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.78, N_2 = 19, M_{rank2} = 42.71) = 271.500, z = -2.738, p = 0.006$; $U(N_1 = 47, M_{rank1} = 26.00, N_3 = 11, M_{rank3} = 44.45) = 94.000, z = -3.590, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.89, N_3 = 11, M_{rank3} = 18.27) = 74.000, z = -1.412, p = 0.158$.

Table 18. Quintile and Performance Level by Academic Performance Standard 2.1.d

Performance Level	2.1.d – Test scores are used to identify curriculum gaps.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	5 (45.5%)	4 (36.4%)	1 (9.1%)	11
Lowest Fifth/ Successful	9 (47.4%)	9 (47.4%)	5 (26.3%)		19
Lowest Fifth/ Level 3	32 (68.1%)	16 (34.0%)	4 (6.4%)		47
Total	42 (54.5%)	30 (39.0%)	12 (15.6%)	1 (1.3%)	77

Indicator 2.1.e – Assessments Designed to Provide Meaningful Feedback on Student Learning

Table 19 shows that while over half of the highest fifth/Successful schools were in Category 3, only 1 of the 66 schools in the other two groups was rated above Category 2. In fact, over 50% of the lowest fifth/Successful schools and more than 60% of the lowest fifth/Level 3 schools were rated in the lowest rating category. The differences between the rating for the highest fifth/Successful schools and the other two groups were significantly higher. There was no significant difference between the two groups in the lowest fifth. The differences between these two groups were, in fact, very small. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.79, N_2 = 19, M_{rank2} = 37.58, N_3 = 11, M_{rank3} = 59.45) = 13.759, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.73, N_2 = 19, M_{rank2} = 35.39) = 410.500, z = -0.596, p = 0.551$; $U(N_1 = 47, M_{rank1} = 26.05, N_3 = 11, M_{rank3} = 44.23) = 96.500, z = -3.582, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.18, N_3 = 11, M_{rank3} = 21.23) = 41.500, z = -2.915, p = 0.004$.

Table 19. Quintile and Performance Level by Academic Performance Standard 2.1.e

Performance Level	2.1.e – Multiple assessments are specifically designed to provide meaningful feedback on student learning for instructional purposes.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	2 (18.2%)	3 (27.3%)	6 (54.5%)		11
Lowest Fifth/Successful	10 (52.6%)	9 (47.4%)			19
Lowest Fifth/Level 3	29 (61.7%)	17 (36.2%)	1 (2.1%)		47
Total	41 (53.2%)	29 (37.7%)	7 (9.1%)	0	77

Indicator 2.1.f – Performance Standards Are Clearly Communicated

Table 20 shows that over 50% of the highest fifth/Successful schools received a rating of 3 or above, while only 2 schools in each of the other two groups (10.5% for the lowest fifth/Successful schools and 4% for the lowest level/Level 3 schools) were rated in Category 3. The highest fifth/Successful schools group mean ranking was significantly higher than either of the other two groups. The mean ranking was fairly close for the other two groups. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.27, N_2 = 19, M_{rank2} = 40.34, N_3 = 11, M_{rank3} = 56.91) = 12.054, p = 0.002$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.93, N_2 = 19, M_{rank2} = 37.39) = 372.500, z = -1.240, p = 0.215$; $U(N_1 = 47, M_{rank1} = 26.34, N_3 = 11, M_{rank3} = 43.00) = 110.000, z = -3.316, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 12.95, N_3 = 11, M_{rank3} = 19.91) = 56.000, z = -2.331, p = 0.020$.

Table 20. Quintile and Performance Level by Academic Performance Standard 2.1.f

Performance Level	2.1.f – Performance standards are clearly communicated, evident in classrooms, and observable in student work.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	4 (36.4%)	5 (45.5%)	1 (9.1%)	11
Lowest Fifth/Successful	4 (21.1%)	13 (68.4%)	2 (10.5%)		19
Lowest Fifth/Level 3	16 (34.0%)	29 (61.7%)	2 (4.3%)		47
Total	41 (53.2%)	46 (59.7%)	9 (11.7%)	1 (1.3%)	77

Indicator 2.1.g – Coordination of State-Required Assessment and Accountability Program

Table 21 shows that the two groups of successful schools were fairly similar in their ratings. The mean ranking for these two groups is fairly similar. Almost 75% of the schools in each of the two groups of successful schools received a rating of Category 3 or 4, while only 21% of the Level 3 schools were rated as high as Category 3. The rankings for both groups of successful schools was significantly higher than the rankings of Level 3 schools. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.95, N_2 = 19, M_{rank2} = 50.24, N_3 = 11, M_{rank3} = 54.00) = 19.528, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.65, N_2 = 19, M_{rank2} = 45.50) = 218.500, z = -3.635, p = 0.000$; $U(N_1 = 47, M_{rank1} = 26.30, N_3 = 11, M_{rank3} = 43.18) = 108.000, z = -3.427, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 14.74, N_3 = 11, M_{rank3} = 16.82) = 90.000, z = -0.750, p = 0.453$.

Table 21. Quintile and Performance Level by Academic Performance Standard 2.1.g

Performance Level	2.1.g – Implementation of the state-required Assessment and Accountability Program is coordinated by school and district leadership.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		3 (27.3%)	6 (54.5%)	2 (18.2%)	11
Lowest Fifth/ Successful	1 (5.3%)	4 (21.1%)	14 (73.7%)		19
Lowest Fifth/ Level 3	5 (10.6%)	32 (68.1%)	10 (21.3%)		47
Total	6 (7.8%)	39 (50.6%)	30 (39.0%)	2 (2.6%)	77

Indicator 2.1.h – Student Work Used to Structure Instruction, Pedagogy, and Curriculum

The rating distribution for the schools shown in Table 22 indicates differences between all three groups. This is born out with findings of significant differences between each group of schools. While 45% of the highest fifth/Successful schools received a rating of 3 or 4, only 5% (one school) in the lowest fifth/Successful and 2% (one school) in the lowest fifth/Level 3 schools achieved a rating as high as Category 3. For the lowest fifth/Successful schools, almost 85% of the schools received a rating of 2. This compares to approximately 55% of the lowest fifth/Level 3 schools. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.67, N_2 = 19, M_{rank2} = 44.71, N_3 = 11, M_{rank3} = 56.18) = 15.409, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.35, N_2 = 19, M_{rank2} = 41.29) = 298.500, z = -2.496, p = 0.013$; $U(N_1 = 47, M_{rank1} = 26.32, N_3 = 11, M_{rank3} = 43.09) = 109.000, z = -3.316, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.42, N_3 = 11, M_{rank3} = 19.09) = 65.000, z = -2.105, p = 0.035$.

Table 22. Quintile and Performance Level by Academic Performance Standard 2.1.h

Performance Level	2.1.h – Samples of student work are analyzed to inform instruction, revise curriculum and pedagogy, and obtain information on student progress.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	5 (45.5%)	4 (36.4%)	1 (9.1%)	11
Lowest Fifth/ Successful	2 (10.5%)	16 (84.2%)	1 (5.3%)		19
Lowest Fifth/ Level 3	20 (42.6%)	26 (55.3%)	1 (2.1%)		47
Total	23 (29.9%)	47 (61.0%)	6 (7.8%)	1 (1.3%)	77

Academic Performance Standard 3 - Instruction

Table 23 shows that almost 60% of ratings for all eight indicators for this standard for the highest fifth/Successful schools are Category 3 or higher. For the other two groups, less than 10% of the cumulative ratings for each group are as high as Category 3 and no school from these two groups was rated as exemplary for any indicator. While there are minor differences between the ratings for the other two groups, the ratings are similar for these two groups. Table 24 shows that 2 of the 8 indicators were significantly different between Successful and Level 3 schools in the lowest fifth for this standard. However, the lowest fifth/Successful schools did have a higher mean ranking than did the Level 3 schools. This table also shows that the highest fifth/Successful schools were rated significantly higher for every indicator than either of the other two groups.

Table 23. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Academic Performance Standard 3 – Instruction

Performance Level	Academic Performance Standard 3 – Instruction				Total
	1	2	3	4	
Highest Fifth/ Successful	1 (1.1%)	36 (40.9%)	43 (48.9%)	8 (9.1%)	88
Lowest Fifth/ Successful	41 (27.0%)	96 (63.2%)	15 (9.9%)	0	152
Lowest Fifth/ Level 3	150 (39.9%)	199 (52.9%)	27 (7.2%)	0	376
Total	192 (31.2%)	331 (53.7%)	85 (13.8%)	8 (1.3%)	616

Table 24. Significance Level of Differences Between Elementary School Groups for Indicators in Academic Performance Standard 3 – Instruction.

	All Groups	Lowest Fifth/Level 3 and Lowest Fifth/Successful	Lowest Fifth/Level 3 and Highest Fifth/Successful	Lowest Fifth/Successful and Highest Fifth/Successful
Indicator 3.1.a	0.000		0.000	0.002
Indicator 3.1.b	0.000		0.000	0.003
Indicator 3.1.c	0.000	0.003	0.000	0.002
Indicator 3.1.d	0.000		0.000	0.000
Indicator 3.1.e	0.001		0.000	0.007
Indicator 3.1.f	0.001		0.000	0.000
Indicator 3.1.g	0.006		0.004	0.022
Indicator 3.1.h	0.000	0.022	0.001	0.000
Total	8 of 8	2 of 8	8 of 8	8 of 8

Indicator 3.1.a – Effective and Varied Instructional Strategies Used in all Classrooms

Table 25 shows that the rankings for the highest fifth/Successful schools group were significantly higher than the rankings for both the other two groups. Over 50% of the schools in the highest fifth/Successful group were rated as Category 3 or higher compared to less than 5% for either of the other two groups. The table also indicates that the lowest fifth/Successful schools group was slightly higher than the Level 3 schools group. However, this difference was not significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.62, N_2 = 19, M_{rank2} = 39.32, N_3 = 11, M_{rank3} = 61.45) = 17.951, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.01, N_2 = 19, M_{rank2} = 37.18) = 376.500, z = -1.161, p = 0.246$; $U(N_1 = 47, M_{rank1} = 25.61, N_3 = 11, M_{rank3} = 46.14) = 75.500, z = -4.070, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.13, N_3 = 11, M_{rank3} = 21.32) = 40.500, z = -3.144, p = 0.002$.

Table 25. Quintile and Performance Level by Academic Performance Standard 3.1.a

Performance Level	3.1.a – There is evidence that effective and varied instructional strategies are used in all classrooms.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		5 (45.5%)	6 (54.5%)		11
Lowest Fifth/Successful	5 (26.3%)	13 (68.4%)	1 (5.3%)		19
Lowest Fifth/Level 3	19 (40.4%)	27 (57.4%)	1 (2.1%)		47
Total	24 (31.2%)	45 (58.4%)	8 (10.4%)		77

Indicator 3.1.b – Instructional Strategies and Learning Activities are Aligned with District, School, and State Learning Goals and Assessment Expectations

Table 26 shows that 55% of the highest fifth/Successful schools were rated in Category 3 or 4, while only two schools (10%) and one school (2%) from the other two school groups were rated that high. The difference in mean ranks for the highest fifth/Successful schools was significantly higher than both the other schools groups. The Successful schools group from the lowest fifth had a slightly higher percentage of schools rated in Category 2 than did the Level 3 schools group. However, this slightly higher percentage of schools was not sufficient to make a significant difference between the two groups. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.33, N_2 = 19, M_{rank2} = 39.84, N_3 = 11, M_{rank3} = 61.77) = 17.944, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.84, N_2 = 19, M_{rank2} = 37.61) = 368.500, z = -1.259, p = 0.208$; $U(N_1 = 47, M_{rank1} = 25.49, N_3 = 11, M_{rank3} = 46.64) = 70.0, z = -4.146, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.24, N_3 = 11, M_{rank3} = 21.14) = 42.5, z = -2.931, p = 0.003$.

Table 26. Quintile and Performance Level by Academic Performance Standard 3.1.b

Performance Level	3.1.b – Instructional strategies and learning activities are aligned with the district, school, and state learning goals and assessment expectations for student learning.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		5 (45.5%)	5 (45.5%)	1 (9.1%)	11
Lowest Fifth/Successful	6 (31.6%)	11 (57.9%)	2 (10.5%)		19
Lowest Fifth/Level 3	21 (44.7%)	25 (53.2%)	1 (2.1%)		47
Total	27 (35.1%)	41 (53.2%)	8 (10.4%)	1 (1.3%)	77

Indicator 3.1.c – Instructional Strategies and Activities are Aligned with Changing Student Needs

Table 27 illustrates that few schools have fully implemented and have a working system to align instructional strategies and activities with changing student needs. While 45% of the schools in the highest fifth/Successful schools group have taken these measures, only one school from the other two groups was rated in Category 3. The lowest fifth/ successful schools group had almost 80% of its schools rated as having this indicator with limited development or partially implemented. The lowest fifth/Level 3 schools group had almost 64% of its schools rated as showing little or no development or implementation for this indicator. The differences between each of the three groups were found to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.80, N_2 = 19, M_{rank2} = 45.53, N_3 = 11, M_{rank3} = 62.77) = 25.361, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.60, N_2 = 19, M_{rank2} = 43.16) = 263.00, z = -2.981, p = 0.003$; $U(N_1 = 47, M_{rank1} = 25.20, N_3 = 11, M_{rank3} = 47.86) = 56.50, z = -4.462, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.37, N_3 = 11, M_{rank3} = 20.91) = 45.00, z = -3.174, p = 0.002$.

Table 27. Quintile and Performance Level by Academic Performance Standard 3.1.c

Performance Level	3.1.c – Instructional strategies and activities are consistently monitored and aligned with the changing needs of a diverse student population to ensure various learning approaches and learning styles are addressed.				Number of Schools
School Groups	1	2	3	4	
Highest Fifth/ Successful		6 (54.5%)	5 (45.5%)		11
Lowest Fifth/ Successful	4 (21.1%)	15 (78.9%)			19
Lowest Fifth/ Level 3	30 (63.8%)	16 (34.0%)	1 (2.1%)		47
Total	34 (44.2%)	37 (48.1%)	6 (7.8%)	0	77

Indicator 3.1.d – Teachers Demonstrate Content Knowledge Necessary to Challenge and Motivate Students

Table 28 shows that every school in the highest fifth/Successful schools group was rated as being Category 3 or 4. In fact, almost 46% of the schools were rated as exemplary (Category 4). However, almost 60% of the successful schools in the lowest fifth and more than 80% of the schools in the Level 3 schools groups had ratings in Category 1 and 2. The highest fifth/Successful schools ranks were significantly higher than the rankings of the schools in both of the other groups. While the successful schools in the lowest fifth had a higher mean ranking than the Level 3 schools, this difference was just above being considered significant at the $p < 0.05$ level. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.52, N_2 = 19, M_{rank2} = 40.92, N_3 = 11, M_{rank3} = 67.64) = 28.070, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.01, N_2 = 19, M_{rank2} = 39.66) = 329.50, z = -1.901, p = 0.057$; $U(N_1 = 47, M_{rank1} = 24.51, N_3 = 11, M_{rank3} = 50.82) = 24.00, z = -5.105, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.26, N_3 = 11, M_{rank3} = 22.82) = 24.00, z = -3.720, p = 0.000$.

Table 28. Quintile and Performance Level by Academic Performance Standard 3.1.d

Performance Level	3.1.d – Teachers demonstrate the content knowledge necessary to challenge and motivate students to high levels of learning.				Number of Schools
School Groups	1	2	3	4	
Highest Fifth/ Successful			6 (54.5%)	5 (45.5%)	11
Lowest Fifth/ Successful	2 (10.5%)	9 (47.4%)	8 (42.1%)		19
Lowest Fifth/ Level 3	8 (17.0%)	31 (66.0%)	8 (17.0%)		47
Total	10 (13.0%)	40 (51.9%)	22 (28.6%)	5 (6.5%)	77

Indicator 3.1.e – Teachers Incorporate Technology in Their Classrooms

Based on the data collected in the audits/reviews that is shown in Table 29, the majority of schools in all groups do not have teachers who have fully incorporated the use of technology in their classrooms. However, the highest fifth/Successful schools are significantly further along in this process than are the schools in the other two school groups. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.17, N_2 = 19, M_{rank2} = 39.61, N_3 = 11, M_{rank3} = 58.59) = 13.819, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.12, N_2 = 19, M_{rank2} = 36.92) = 381.5, z = -1.059, p = 0.290$; $U(N_1 = 47, M_{rank1} = 26.05, N_3 = 11, M_{rank3} = 44.23) = 96.500, z = -3.628, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.68, N_3 = 11, M_{rank3} = 20.36) = 51.00, z = -2.687, p = 0.007$.

Table 29. Quintile and Performance Level by Academic Performance Standard 3.1.e

Performance Level	3.1.e – There is evidence that teachers incorporate the use of technology in their classrooms.				Number of Schools
School Groups	1	2	3	4	
Highest Fifth/Successful		7 (63.6%)	4 (36.4%)		11
Lowest Fifth/Successful	6 (31.6%)	12 (63.2%)	1 (5.3%)		19
Lowest Fifth/Level 3	21 (44.7%)	25 (53.2%)	1 (2.1%)		47
Total	27 (35.1%)	44 (57.1%)	6 (7.8%)	0	77

Indicator 3.1.f – Instructional Resources are Sufficient to Effectively Deliver the Curriculum

The data displayed in Table 30 show that the audit/review teams found that the schools in the highest fifth/Successful group had the instructional resources that were sufficient to effectively deliver the curriculum. They rated over 90% of the schools in this group in Categories 3 or 4, while only 16% and 17% of the schools in the other two groups received a rating in Category 3 (no schools from these two groups received a rating of 4). For the other two groups, 74% of the successful schools and 55% of the schools at Level 3 received a rating of 2. The difference between the two groups in the lowest fifth was not significant. The differences in the ranks between the highest fifth/Successful schools and each of the other two groups were significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.45, N_2 = 19, M_{rank2} = 37.87, N_3 = 11, M_{rank3} = 64.68) = 21.159, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.23, N_2 = 19, M_{rank2} = 36.63) = 387.00, z = -0.966, p = 0.334$; $U(N_1 = 47, M_{rank1} = 25.21, N_3 = 11, M_{rank3} = 47.82) = 57.00, z = -4.302, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.24, N_3 = 11, M_{rank3} = 22.86) = 23.50, z = -3.870, p = 0.000$.

Table 30. Quintile and Performance Level by Academic Performance Standard 3.1.f

Performance Level	3.1.f – Instructional resources are sufficient to effectively deliver the curriculum.				Number of Schools
School Groups	1	2	3	4	
Highest Fifth/ Successful		1 (9.1%)	9 (81.8%)	1 (9.1%)	11
Lowest Fifth/ Successful	2 (10.5%)	14 (73.7%)	3 (15.8%)		19
Lowest Fifth/ Level 3	13 (27.7%)	26 (55.3%)	8 (17.0%)		47
Total	15 (19.5%)	41 (53.2%)	20 (26.0%)	1 (1.3%)	77

Indicator 3.1.g – Teachers Collaboratively Examine Student Work to Inform Instructional Practice

Table 31 shows that the audit/review teams found that very few elementary schools have fully functioning programs where teachers examine and discuss student work collaboratively. All but five schools—two in the highest fifth/Successful group (18.1%) and three in the lowest fifth/Level 3 group (6.4%)—were rated in Category 1 or 2. Even though so many schools were rated in these two categories, the highest fifth/Successful schools group ranks were still significantly higher than both of the other two groups, while the difference between the other two groups did not reach the level of significance specified. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.24, N_2 = 19, M_{rank2} = 41.92, N_3 = 11, M_{rank3} = 54.27) = 10.122, p = 0.006$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.53, N_2 = 19, M_{rank2} = 38.37) = 354.00, z = -1.500, p = 0.134$; $U(N_1 = 47, M_{rank1} = 26.71, N_3 = 11, M_{rank3} = 41.41) = 127.50, z = -2.918, p = 0.004$; and $U(N_2 = 19, M_{rank2} = 13.55, N_3 = 11, M_{rank3} = 18.86) = 67.50, z = -2.284, p = 0.022$.

Table 31. Quintile and Performance Level by Academic Performance Standard 3.1.g

Performance Level	3.1.g – Teachers examine and discuss student work collaboratively and use this information to inform their practice.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/ Successful		9 (81.8%)	1 (9.1%)	1 (9.1%)	11
Lowest Fifth/ Successful	4 (21.1%)	15 (78.9%)			19
Lowest Fifth/ Level 3	22 (46.8%)	22 (46.8%)	3 (6.4%)		47
Total	26 (33.8%)	46 (59.7%)	4 (5.2%)	1 (1.3%)	77

Indicator 3.1.h – Evidence That Homework is Frequent and Monitored and Tied to Instructional Practice

The audit/review teams' findings for this indicator are interesting and difficult to interpret by looking only at the numbers. As shown in Table 32, the highest fifth/Successful schools rankings are significantly higher than the other two groups. The audit/review teams rated almost 64% of these schools in Category 3. Finding only 64% of the schools in this group within this rating may seem low, but it is still significantly higher than the 0% and 8.5% of the other two groups. These two findings concerning the highest fifth/Successful schools group are what would be expected. However, in comparing the successful schools and the Level 3 schools groups from the lowest fifth, we find that the Level 3 schools' mean rank is higher than the successful schools' mean rank. This can also be seen in the percentages of schools from each group in Category 1 and 2. These results are the opposite of what would be expected. It is particularly surprising to find that the audit/review teams found that over 60% of successful schools in the lowest fifth were rated in Category 1 – little or no development or implementation. Further analysis of the descriptions in the audits/reviews for this category would be required to provide an explanation of these results. However, the difference between these two groups is sufficient to be considered significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 38.81, N_2 = 19, M_{rank2} = 27.16, N_3 = 11, M_{rank3} = 60.27) = 18.338, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 36.56, N_2 = 19, M_{rank2} = 25.92) = 302.50, z = -2.299, p = 0.022$; $U(N_1 = 47, M_{rank1} = 26.24, N_3 = 11, M_{rank3} = 43.41) = 105.50, z = -3.331, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 11.24, N_3 = 11, M_{rank3} = 22.86) = 23.50, z = -3.738, p = 0.000$.

Table 32. Quintile and Performance Level by Academic Performance Standard 3.1.h

Performance Level	3.1.h – There is evidence that homework is frequent and monitored and tied to instructional practice.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	3 (27.3%)	7 (63.7%)		11
Lowest Fifth/Successful	12 (63.2%)	7 (36.7%)			19
Lowest Fifth/Level 3	16 (34.0%)	27 (57.4%)	4 (8.5%)		47
Total	29 (37.7%)	37 (48.1%)	11 (14.3%)	0	77

Learning Environment Standard 4 – School Culture

Table 33 and Table 34 show that there are significant differences between all three groups of schools for the indicators in this standard. The total number of ratings for each group for the indicators in this standard shows that almost 90% of the ratings received by the highest fifth/Successful schools fell in either Category 3 or 4. Table 34 shows that 7 of the 11 indicators in this standard were significantly different between the two school groups within the lowest fifth. However, Table 33 shows that both these groups have a significant amount of work needed to improve their ratings to Category 3.

Table 33. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Learning Environment Standard 4 – School Culture

Performance Level	Learning Environment Standard 4 – School Culture				Total
School Group	1	2	3	4	
Highest Fifth/ Successful	0	13 (10.7%)	71 (58.7%)	37 (30.6%)	121
Lowest Fifth/ Successful	21 (10.0%)	126 (60.3%)	62 (29.7%)	0	209
Lowest Fifth/ Level 3	160 (30.9%)	272 (52.6%)	84 (16.2%)	1 (0.2%)	517
Total	181 (21.4%)	411 (48.5%)	217 (25.6%)	38 (4.5%)	847

Table 34. Significance Level of Differences Between Elementary School Groups for Indicators in Learning Environment Standard 4 – School Culture.

	All Groups	Lowest Fifth/ Level 3 and Lowest Fifth/ Successful	Lowest Fifth/ Level 3 and Highest Fifth/ Successful	Lowest Fifth/ Successful and Highest Fifth/ Successful
Indicator 4.1.a	0.000	0.004	0.000	0.004
Indicator 4.1.b	0.000	0.020	0.000	0.000
Indicator 4.1.c	0.000		0.000	0.000
Indicator 4.1.d	0.000	0.004	0.000	0.005
Indicator 4.1.e	0.000		0.000	0.001
Indicator 4.1.f	0.000	0.014	0.000	0.008
Indicator 4.1.g	0.000		0.000	0.000
Indicator 4.1.h	0.000		0.000	0.000
Indicator 4.1.i	0.000	0.010	0.000	0.001
Indicator 4.1.j	0.000	0.044	0.000	0.000
Indicator 4.1.k	0.000	0.042	0.000	0.001
Total	11 of 11	7 of 11	11 of 11	11 of 11

Indicator 4.1.a – Leadership Support for a Safe, Orderly, and Equitable Learning Environment

Table 35 shows a distinct difference between the three groups. The highest fifth/Successful schools group has over 90% of its schools achieving a Category 3 or Category 4 rating, while 63% of the lowest fifth/Successful schools group achieved this rating, and only 25% of the lowest fifth/Level 3 schools were able to achieve this rating. The mean rank of the ratings for each of the three groups is significantly different with the higher scoring schools and the Successful schools groups achieving the higher mean ranks. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.63, N_2 = 19, M_{rank2} = 45.82, N_3 = 11, M_{rank3} = 63.00) = 23.940, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.48, N_2 = 19, M_{rank2} = 43.45) = 257.50, z = -2.899, p = 0.004$; $U(N_1 = 47, M_{rank1} = 25.15, N_3 = 11, M_{rank3} = 48.09) = 54.00, z = -4.305, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.37, N_3 = 11, M_{rank3} = 20.91) = 45.00, z = -2.860, p = 0.004$.

Table 35. Quintile and Performance Level by Learning Environment Standard 4.1.a

Performance Level	4.1.a – There is leadership support for a safe, orderly, and equitable learning environment (e.g., culture audits/school opinion surveys).				Number of Schools
School Groups	1	2	3	4	
Highest Fifth/Successful		1 (9.1%)	5 (45.4%)	5 (45.5%)	11
Lowest Fifth/Successful	1 (5.3%)	6 (31.6%)	12 (63.2%)		19
Lowest Fifth/Level 3	11 (23.4%)	24 (51.1%)	12 (25.5%)		47
Total	12 (15.6%)	31 (40.3%)	29 (37.7%)	5 (6.5%)	77

Indicator 4.1.b – Leadership Fosters Belief That All Children Can Learn at High Levels

Table 36 shows that the audit/review teams found that the higher performing schools (highest fifth) are performing significantly higher than the lower performing (lowest fifth) schools for this indicator. Every highest fifth school that received an audit or review was rated as either having fully functioning and implemented programs in this area or having exemplary programs. However, only 26% of the successful schools in the lowest fifth and 11% of the Level 3 schools received a rating of 3. However, the successful schools in the lowest fifth did have rankings that were significantly higher than the rankings of the Level 3 schools. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.69, N_2 = 19, M_{rank2} = 42.03, N_3 = 11, M_{rank3} = 69.27) = 31.184, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.37, N_2 = 19, M_{rank2} = 41.24) = 299.50, z = -2.332, p = 0.020$; $U(N_1 = 47, M_{rank1} = 24.32, N_3 = 11, M_{rank3} = 51.64) = 15.00, z = -5.127, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 10.79, N_3 = 11, M_{rank3} = 23.64) = 15.00, z = -4.100, p = 0.000$.

Table 36. Quintile and Performance Level by Learning Environment Standard 4.1.b

Performance Level	4.1.b – Leadership creates experiences that foster the belief that all children can learn at high levels in order to motivate staff to produce continuous improvement in student learning.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful			6 (54.5%)	5 (45.5%)	11
Lowest Fifth/Successful	2 (10.5%)	12 (63.2%)	5 (26.3%)		19
Lowest Fifth/Level 3	17 (36.2%)	25 (53.2%)	5 (10.6%)		47
Total	19 (24.7%)	37 (48.1%)	16 (20.8%)	5 (6.5%)	77

Indicator 4.1.c – Teachers Hold High Expectations for all Students Academically and Behaviorally

The audit/review teams found a significant difference in the expectations that teachers in the highest fifth schools held and practiced for their students compared to teachers in the lowest fifth schools. Audit/review teams rated over 90% of the highest fifth/Successful schools in the fully implemented or exemplary categories. This compared with no schools in the lowest fifth/Successful schools group and only 4 schools (8.5%) in the lowest fifth/Level 3 schools group. The results of the Mann-Whitney tests show that the highest fifth/Successful schools rankings are significantly higher than the rankings of both of the other two groups and that there was not a significant difference in the mean ranks between the two groups in the lowest fifth. Results are shown in Table 37. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.30, N_2 = 19, M_{rank2} = 36.18, N_3 = 11, M_{rank3} = 68.23) = 29.603, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.60, N_2 = 19, M_{rank2} = 35.74) = 404.00, z = -0.760, p = 0.447$; $U(N_1 = 47, M_{rank1} = 24.70, N_3 = 11, M_{rank3} = 50.00) = 33.00, z = -4.911, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 10.45, N_3 = 11, M_{rank3} = 24.23) = 8.50, z = -4.706, p = 0.000$.

Table 37. Quintile and Performance Level by Learning Environment Standard 4.1.c

Performance Level	4.1.c – Teachers hold high expectations for all students academically and behaviorally, and this is evidenced in their practice.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		1 (9.1%)	7 (63.6%)	3 (27.3%)	11
Lowest Fifth/Successful	2 (10.5%)	17 (89.5%)			19
Lowest Fifth/Level 3	13 (27.7%)	30 (63.8%)	4 (8.5%)		47
Total	15 (19.5%)	48 (62.3%)	11 (14.3%)	3 (3.9%)	77

Indicator 4.1.d – Teachers and Non-Teaching Staff Are Involved in Both Formal and Informal Decision-making Processes Regarding Teaching and Learning

Data from the audit/review teams show a distinctive difference between the three groups for this indicator. All three groups were found to be significantly different. Table 38 shows that the teams found that more than 80% of the highest fifth/Successful teams were in Category 3 or 4, while only about 38% and 9% of the other two groups were in Category 3. The lowest fifth/Level 3 schools were almost evenly split between Category 1 (45%) and 2 (47%). The lowest fifth/Successful schools had about 47% in Category 2, with Category 3 having the next highest number of schools with 38%. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.39, N_2 = 19, M_{rank2} = 45.71, N_3 = 11, M_{rank3} = 64.18) = 25.674, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.50, N_2 = 19, M_{rank2} = 43.39) = 258.50, z = -2.898, p = 0.004$; $U(N_1 = 47, M_{rank1} = 24.89, N_3 = 11, M_{rank3} = 49.18) = 42.00, z = -4.586, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.32, N_3 = 11, M_{rank3} = 21.00) = 44.00, z = -2.794, p = 0.005$.

Table 38. Quintile and Performance Level by Learning Environment Standard 4.1.d

Performance Level	4.1.d – Teachers and non-teaching staff are involved in both formal and informal decision-making processes regarding teaching and learning.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	6 (54.5%)	3 (27.3%)	11
Lowest Fifth/Successful	3 (15.8%)	9 (47.4%)	7 (36.8%)		19
Lowest Fifth/Level 3	21 (44.7%)	22 (46.8%)	4 (8.5%)		47
Total	24 (31.2%)	33 (42.9%)	17 (22.1%)	3 (3.9%)	77

Indicator 4.1.e – Teachers Recognize and Accept Their Professional Role in Student Success and Failure

Audit/review teams found differences between the highest fifth and lowest fifth schools in this indicator (see Table 39). Over 80% of the highest fifth schools were given ratings of Category 3 (73%) or 4 (9%), while only 16% (lowest fifth/Successful schools) and 6% (lowest fifth/Level 3 schools) received a rating in Category 3. Most schools in the other two groups (55% and 52%) were rated in Category 2. When comparing any two groups of schools, only the differences between the highest fifth/Successful schools and the other two groups were found to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.35, N_2 = 19, M_{rank2} = 40.24, N_3 = 11, M_{rank3} = 65.27) = 23.332, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.41, N_2 = 19, M_{rank2} = 38.66) = 348.50, z = -1.580, p = 0.114$; $U(N_1 = 47, M_{rank1} = 24.94, N_3 = 11, M_{rank3} = 49.00) = 44.00, z = -4.612, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.58, N_3 = 11, M_{rank3} = 22.27) = 30.00, z = -3.483, p = 0.000$.

Table 39. Quintile and Performance Level by Learning Environment Standard 4.1.e

Performance Level	4.1.e – Teachers recognize and accept their professional role in student success and failure.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/ Successful		2 (18.2%)	8 (72.7%)	1 (9.1%)	11
Lowest Fifth/ Successful	4 (21.1%)	12 (63.2%)	3 (15.8%)		19
Lowest Fifth/ Level 3	18 (38.3%)	26 (55.3%)	3 (6.4%)		47
Total	22 (28.6%)	40 (51.9%)	14 (18.2%)	1 (1.3%)	77

Indicator 4.1.f – Staff is Assigned to Maximize Opportunities for all Students to Have Access to the Staff’s Instructional Strengths

Table 40 indicates that audit/review teams found distinctive differences between each of the three groups of schools. All of these differences were found to be significant. Almost 75% of the highest fifth/Successful schools were rated in Category 3 or 4, while 32% of the lowest fifth/Successful schools and only about 8% of the lowest fifth/Level 3 schools earned this rating. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.23, N_2 = 19, M_{rank2} = 44.37, N_3 = 11, M_{rank3} = 62.91) = 22.069, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.10, N_2 = 19, M_{rank2} = 41.92) = 286.50, z = -2.470, p = 0.014$; $U(N_1 = 47, M_{rank1} = 25.14, N_3 = 11, M_{rank3} = 48.14) = 53.50, z = -4.357, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.45, N_3 = 11, M_{rank3} = 20.77) = 46.500, z = -2.654, p = 0.008$.

Table 40. Quintile and Performance Level by Learning Environment Standard 4.1.f

Performance Level	4.1.f – The school intentionally assigns staff to maximize opportunities for all students to have access to the staff’s instructional strengths.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/ Successful		3 (27.3%)	5 (45.5%)	3 (27.3%)	11
Lowest Fifth/ Successful	4 (21.1%)	9 (47.4%)	6 (31.6%)		19
Lowest Fifth/ Level 3	22 (46.8%)	21 (44.7%)	4 (8.5%)		47
Total	26 (33.8%)	33 (42.9%)	15 (19.5%)	3 (3.9%)	77

Indicator 4.1.g – Teachers Communicate Regularly with Families About Individual Students’ Progress

Audit/review teams rated the highest fifth/Successful schools group higher than either of the other two groups. Table 41 shows that over 90% of the schools in this group were rated in Category 3 or 4. The mean rank of the lowest fifth/Successful schools group was higher than that of the Level 3 schools group, but not significantly different. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 35.74, N_2 = 19, M_{rank2} = 34.13, N_3 = 11, M_{rank3} = 61.32) = 15.553, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 33.86, N_2 = 19, M_{rank2} = 32.61) = 429.50, z = -0.272, p = 0.786$; $U(N_1 = 47, M_{rank1} = 25.88, N_3 = 11, M_{rank3} = 44.95) = 88.50, z = -3.661, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.53, N_3 = 11, M_{rank3} = 22.36) = 29.00, z = -3.557, p = 0.000$.

Table 41. Quintile and Performance Level by Learning Environment Standard 4.1.g

Performance Level	4.1.g – Teachers communicate regularly with families about individual students’ progress (e.g., engage through conversation).				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		1 (9.1%)	7 (63.6%)	3 (27.3%)	11
Lowest Fifth/Successful	4 (21.1%)	9 (47.4%)	6 (31.6%)		19
Lowest Fifth/Level 3	22 (46.8%)	21 (44.7%)	4 (8.5%)		47
Total	26 (33.8%)	33 (42.9%)	15 (19.5%)	3 (3.9%)	77

Indicator 4.1.h- Teachers and Staff Care About Students and Inspire Their Best Efforts

Table 42 shows the differences that audit/review teams found for this indicator between the highest fifth/Successful schools group and the other two groups. The differences between the other two groups were not sufficient to be significant based on these data. For the highest fifth/Successful schools group, audit/review teams rated 55% of the schools exemplary (Category 4) and the other 45% fully functioning (Category 3). Over half of the schools in the other two groups were rated in Category 2—limited development and partial implementation. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.66, N_2 = 19, M_{rank2} = 38.87, N_3 = 11, M_{rank3} = 66.32) = 24.327, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.81, N_2 = 19, M_{rank2} = 37.68) = 367.00, z = -1.284, p = 0.199$; $U(N_1 = 47, M_{rank1} = 24.85, N_3 = 11, M_{rank3} = 49.36) = 40.00, z = -4.699, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.18, N_3 = 11, M_{rank3} = 22.95) = 22.50, z = -3.818, p = 0.000$.

Table 42. Quintile and Performance Level by Learning Environment Standard 4.1.h

Performance Level	4.1.h – There is evidence that the teachers and staff care about students and inspire their best efforts.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/ Successful			5 (45.5%)	6 (54.5%)	11
Lowest Fifth/ Successful		10 (52.6%)	9 (47.4%)		19
Lowest Fifth/ Level 3	4 (8.5%)	27 (57.4%)	16 (34.0%)		47
Total	4 (8.5%)	37 (48.1%)	30 (39.0%)	6 (7.8%)	77

Indicator 4.1.i – Multiple Communication Strategies and Contexts Are Used for Dissemination of Information to all Stakeholders

In Table 43, we see a distinct difference between the three groups, and all comparisons are significant. The highest fifth/Successful schools have over 90% of their schools rated in Category 3 (64%) and 4 (27%). The lowest fifth/Successful schools have all their schools in Categories 2 (68%) and 3 (32%), while the lowest fifth/Level 3 schools have their schools spread across Category 1 (36%), Category 2 (45%), and Category 3 (19%). The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.05, N_2 = 19, M_{rank2} = 44.00, N_3 = 11, M_{rank3} = 64.32) = 24.043, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.97, N_2 = 19, M_{rank2} = 42.24) = 280.50, z = -2.573, p = 0.010$; $U(N_1 = 47, M_{rank1} = 25.09, N_3 = 11, M_{rank3} = 48.36) = 51.00, z = -4.340, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.76, N_3 = 11, M_{rank3} = 21.95) = 33.50, z = -3.381, p = 0.001$.

Table 43. Quintile and Performance Level by Learning Environment Standard 4.1.i

Performance Level	4.1.i – Multiple communication strategies and contexts are used for the dissemination of information to all stakeholders.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/ Successful		1 (9.1%)	7 (63.6%)	3 (27.3%)	11
Lowest Fifth/ Successful		13 (68.4%)	6 (31.6%)		19
Lowest Fifth/ Level 3	17 (36.2%)	21 (44.7%)	9 (19.1%)		47
Total	17 (21.1%)	35 (45.5%)	22 (28.6%)	3 (3.9%)	77

Indicator 4.1.j – Student Achievement Is Highly Valued and Publicly Celebrated

Table 44 shows differences between the three groups. In the table, we see that all schools in the highest fifth/Successful schools group are in Category 3 (54.5%) and Category 4 (45.5%). The lowest fifth/Successful school group had the majority (63%) rated as Category 2, with 32% of the schools rated in Category 3. The lowest fifth/Level 3 schools group had 62% rated in Category 2, 23% rated in Category 1, 13% rated in Category 3, and 2% rated in Category 4. All differences were found to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.45, N_2 = 19, M_{rank2} = 40.92, N_3 = 11, M_{rank3} = 67.95) = 28.749, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.88, N_2 = 19, M_{rank2} = 39.97) = 323.50, z = -2.014, p = 0.044$; $U(N_1 = 47, M_{rank1} = 24.56, N_3 = 11, M_{rank3} = 50.59) = 26.50, z = -4.966, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 10.95, N_3 = 11, M_{rank3} = 23.36) = 18.00, z = -3.995, p = 0.000$.

Table 44. Quintile and Performance Level by Learning Environment Standard 4.1.j

Performance Level	4.1.j – There is evidence that student achievement is highly valued and publicly celebrated (e.g., displays of student work, assemblies).				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful			6 (54.5%)	5 (45.5%)	11
Lowest Fifth/Successful	1 (5.3%)	12 (63.2%)	6 (31.6%)		19
Lowest Fifth/Level 3	11 (23.4%)	29 (61.7%)	6 (12.8%)	1 (2.1%)	47
Total	12 (15.6%)	41 (53.2%)	18 (23.4%)	6 (7.8%)	77

Indicator 4.1.k – School/District Provides Support for the Physical, Cultural, Socio-Economic, and Intellectual Needs of All Students

Table 45 shows differences between all three groups. The highest fifth/Successful schools group had 81% of the schools rated in Category 3 and the remainder in Category 2. The lowest fifth/Successful schools group had 68% rated in Category 2. The remaining schools from this group were rated almost equally in Category 1 (15%) and Category 3 (16%). The lowest fifth/Level 3 schools group had 49% rated in Category 2 and 43% rated in Category 1. The remaining 8% were rated in Category 3. All observed differences were significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.82, N_2 = 19, M_{rank2} = 41.95, N_3 = 11, M_{rank3} = 64.59) = 23.173, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.78, N_2 = 19, M_{rank2} = 40.24) = 318.50, z = -2.034, p = 0.042$; $U(N_1 = 47, M_{rank1} = 25.04, N_3 = 11, M_{rank3} = 48.55) = 49.00, z = -4.460, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.71, N_3 = 11, M_{rank3} = 22.05) = 32.50, z = -3.441, p = 0.001$.

Table 45. Quintile and Performance Level by Learning Environment Standard 4.1.k

Performance Level	4.1.k – This school/district provides support for the physical, cultural, socioeconomic, and intellectual needs of all students, which reflect a commitment to equity and appreciation of diversity.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	9 (81.3%)		11
Lowest Fifth/Successful	3 (15.3%)	13 (68.4%)	3 (15.8%)		19
Lowest Fifth/Level 3	20 (42.6%)	23 (48.9%)	4 (8.5%)		47
Total	23 (29.9%)	38 (49.4%)	16 (20.8%)	0	77

Learning Environment Standard 5 – Student, Family, and Community Support

Table 46 shows a distinct difference between the highest fifth/Successful schools and the other two groups. The table also shows some differences between the lowest fifth/Successful schools and the lowest fifth/Level 3 schools. Table 47 reinforces these observations by showing that all indicators in Learning Environment Standard 5 for highest fifth/Successful schools were significantly higher than for the other two groups. The table shows that only 3 of the 5 indicators had a significant difference between lowest fifth/Successful and lowest fifth/Level 3 schools.

Table 46. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Learning Environment Standard 5 – Student, Family, and Community Support

Performance Level	Learning Environment Standard 5 – Student, Family, and Community Support				Total
School Group	1	2	3	4	
Highest Fifth/Successful	0	8 (14.5)	34 (61.8%)	13 (23.6%)	55
Lowest Fifth/Successful	4 (4.2%)	65 (68.4%)	26 (27.4%)	0	95
Lowest Fifth/Level 3	58 (24.7%)	139 (59.1%)	38 (16.2%)	0	235
Total	62 (16.1%)	212 (55.1%)	98 (25.5%)	13 (3.4%)	385

Table 47. Significance Level of Differences Between Elementary School Groups for Indicators in Learning Environment Standard 5 – Student, Family, and Community.

	All Groups	Lowest Fifth/ Level 3 and Lowest Fifth/ Successful	Lowest Fifth/ Level 3 and Highest Fifth/ Successful	Lowest Fifth/ Successful and Highest Fifth/ Successful
Indicator 5.1.a	0.000		0.000	0.000
Indicator 5.1.b	0.000	0.007	0.000	0.000
Indicator 5.1.c	0.000		0.000	0.001
Indicator 5.1.d	0.000	0.025	0.000	0.002
Indicator 5.1.e	0.001	0.044	0.000	0.026
Total	5 of 5	3 of 5	5 of 5	5 of 5

Indicator 5.1.a – Families and the Communities are active Partners in the Educational Process

Table 48 shows a major difference between ratings of the highest fifth/Successful schools group and both of the other two groups. These results indicate that the highest fifth/Successful schools group has performed very well for this indicator, with all schools being rated in Category 3 or 4. The table also shows that the other two groups must make improvements to reach Category 3, since only about 26% and 19% of the schools in the other two groups were rated in at this level. The table also shows that the successful schools in the lowest fifth were further along in the implementation (although not quite enough to be considered significant) of activities for this indicator. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.56, N_2 = 19, M_{rank2} = 39.76, N_3 = 11, M_{rank3} = 69.45) = 30.741, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.18, N_2 = 19, M_{rank2} = 39.24) = 337.50, z = -1.787, p = 0.074$; $U(N_1 = 47, M_{rank1} = 24.38, N_3 = 11, M_{rank3} = 51.36) = 18.00, z = -5.086, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 10.53, N_3 = 11, M_{rank3} = 24.09) = 10.00, z = -4.386, p = 0.000$.

Table 48. Quintile and Performance Level by Learning Environment Standard 5.1.a

Performance Level	5.1.a – Families and the communities are active partners in the educational process and work together with the school/district staff to promote programs and services for all students.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful			4 (36.4%)	7 (63.6%)	11
Lowest Fifth/Successful		14 (73.7%)	5 (26.3%)		19
Lowest Fifth/Level 3	11 (23.4%)	27 (57.4%)	9 (19.1%)		47
Total	11 (14.3%)	41 (53.2%)	18 (23.4%)	7 (9.1%)	77

Indicator 5.1.b – All Students Have Access to all the Curriculum

Table 49 displays results of audits/reviews for the three groups. Approximately 80% of the highest fifth/Successful schools group were rated in Category 3 (73%) or Category 4 (9%). These ratings are significantly higher than those of either of the other two groups. Only about 15% of the schools in the lowest fifth/Successful schools group and only 2 schools (4%) from the lowest fifth/Level 3 schools group achieved a rating in Category 3. The differences between the two groups in the lowest fifth were significant, with the Successful schools group achieving a higher mean ranking for their ratings. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.03, N_2 = 19, M_{rank2} = 43.50, N_3 = 11, M_{rank3} = 65.27) = 28.394, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.16, N_2 = 19, M_{rank2} = 41.76) = 289.50, z = -2.684, p = 0.007$; $U(N_1 = 47, M_{rank1} = 24.87, N_3 = 11, M_{rank3} = 49.27) = 41.00, z = -4.760, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.74, N_3 = 11, M_{rank3} = 22.00) = 33.00, z = -3.508, p = 0.000$.

Table 49. Elementary Quintile and Performance Level by Learning Environment Standard 5.1.b

Performance Level	5.1.b – Structures are in place to ensure that all students have access to all the curriculum (e.g., school guidance, FRYSC's, ESS).				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	8 (72.7%)	1 (9.1%)	11
Lowest Fifth/Successful	1 (5.3%)	15 (78.9%)	3 (15.8%)		19
Lowest Fifth/Level 3	15 (34.0%)	29 (61.7%)	2 (4.3%)		47
Total	17 (22.1%)	46 (59.7%)	12 (16.9%)	1 (1.3%)	77

Indicator 5.1.c – The School/District Provides Organizational Structures and Supports Instructional Practices to Reduce Barriers to Learning

Table 50 shows that just over 80% of the highest fifth/Successful schools earned a rating of Category 3 (63%) or Category 4 (18%) for this indicator. The table illustrates the significant difference in the ratings between the highest level/Successful schools group and the other two groups. While the lowest fifth/Successful schools group's ratings had a mean rank that was higher than that of the lowest fifth/Level 3 group, the difference for the mean rank was not large enough to be considered significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.14, N_2 = 19, M_{rank2} = 38.00, N_3 = 11, M_{rank3} = 61.50) = 17.432, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.45, N_2 = 19, M_{rank2} = 36.11) = 397.00, z = -0.842, p = 0.400$; $U(N_1 = 47, M_{rank1} = 25.69, N_3 = 11, M_{rank3} = 45.77) = 79.5, z = -3.948, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.89, N_3 = 11, M_{rank3} = 21.73) = 36.00, z = -3.297, p = 0.001$.

Table 50. Quintile and Performance Level by Learning Environment Standard 5.1.c

Performance Level	5.1.c – The school/district provides organizational structures and supports instructional practices to reduce barriers to learning.				Number of Schools
School Group	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	7 (63.3%)	2 (18.2%)	11
Lowest Fifth/Successful	1 (5.3%)	14 (73.7%)	4 (21.1%)		19
Lowest Fifth/Level 3	8 (17.0%)	30 (63.8%)	9 (19.1%)		47
Total	9 (11.7%)	46 (59.7%)	20 (26.0%)	2 (2.6%)	77

Indicator 5.1.d – Students Are Provided With a Variety of Opportunities to Receive Additional Assistance to Support Their Learning, Beyond the Initial Classroom Instruction

Table 51 shows that over 80% of the schools in the highest fifth/Successful group were rated in Category 3. Only 21% of schools in the lowest fifth/Successful group and 8% of the schools in the lowest fifth/Level 3 group received this rating. The highest fifth/Successful group's mean ranking for the ratings was significantly higher than the mean ranking of the other two groups. The lowest fifth/Successful group's mean rank was significantly higher than the lowest fifth/Level 3 group's mean rank. For the two groups of lowest fifth schools, only 21% of the Successful schools and 8% of the Level 3 schools received a Category 3 rating. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.88, N_2 = 19, M_{rank2} = 42.55, N_3 = 11, M_{rank3} = 63.27) = 23.611, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.69, N_2 = 19, M_{rank2} = 40.45) = 314.50, z = -2.246, p = 0.025$; $U(N_1 = 47, M_{rank1} = 25.19, N_3 = 11, M_{rank3} = 47.91) = 56.00, z = -4.463, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.11, N_3 = 11, M_{rank3} = 21.36) = 40.00, z = -3.168, p = 0.002$.

Table 51. Quintile and Performance Level by Learning Environment Standard 5.1.d

Performance Level	5.1.d – Students are provided with a variety of opportunities to receive additional assistance to support their learning, beyond the initial classroom instruction.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	9 (81.8%)		11
Lowest Fifth/Successful	1 (5.3%)	14 (73.7%)	4 (21.1%)		19
Lowest Fifth/Level 3	13 (27.7%)	30 (63.8%)	4 (8.5%)		47
Total	14 (18.2%)	46 (59.7%)	17 (22.1%)	0	77

Indicator 5.1.e – The School Maintains an Accurate Student Record System That Provides Timely Information Pertinent to the Student’s Academic and Educational Development

Table 52 shows that the ratings for the three groups of schools are approximately what would be expected—highest fifth/Successful have higher ratings than lowest fifth/Successful which have higher ratings than lowest fifth/Level 3. Test results indicate that all differences are significant. Also, approximately 80% of the highest fifth/Successful schools were rated in either Category 3 (54.5%) or Category 4 (27.3%). Additionally, 53% of the lowest fifth/Successful schools were rated in Category 3. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.70, N_2 = 19, M_{rank2} = 43.42, N_3 = 11, M_{rank3} = 58.27) = 14.698, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.72, N_2 = 19, M_{rank2} = 40.37) = 316.00, z = -2.012, p = 0.044$; $U(N_1 = 47, M_{rank1} = 25.98, N_3 = 11, M_{rank3} = 44.55) = 93.00, z = -3.511, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.05, N_3 = 11, M_{rank3} = 19.73) = 58.00, z = -2.222, p = 0.026$.

Table 52. Quintile and Performance Level by Learning Environment Standard 5.1.e

Performance Level	5.1.e – The school maintains an accurate student record system that provides timely information pertinent to the student’s academic and educational development.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	6 (54.5%)	3 (27.3%)	11
Lowest Fifth/Successful	1 (5.3%)	8 (42.1%)	10 (52.6%)		19
Lowest Fifth/Level 3	10 (21.3%)	23 (48.9%)	14 (29.8%)		47
Total	11 (14.3%)	33 (42.9%)	30 (39.0%)	3 (3.9%)	77

Learning Environment Standard 6 – Professional Growth, Development, and Evaluation

Several items of note are contained in Table 53 and Table 54. First, ratings for the three groups are approximately what would be expected. Second, for this standard the difference between the Successful groups stands out far more than the difference in academic index as shown by the quintile for each group. In fact, only 4 of the 12 indicators are significantly different between the highest fifth/Successful group and the lowest fifth/Successful group. Note that 11 of 12 indicators are significantly different for the Successful and the Level 3 schools in the lowest fifth, while 12 of 12 indicators are significantly different for the highest fifth/Successful schools group and the lowest fifth/Level 3 schools group. Almost 75% of the highest fifth/Successful schools achieved ratings of Category 3 or 4. This contrasts with 44% for the lowest fifth/Successful schools group and only 16% for the lowest fifth/Level 3 schools group. Additionally, almost 40% of the lowest fifth/Level 3 schools were rated in Category 1 – Little or no development or implementation.

Table 53. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Learning Environment Standard 6 – Professional Growth, Development, and Evaluation

Performance Level	Learning Environment Standard 6 – Professional Growth, Development, and Evaluation				Total
	1	2	3	4	
Highest Fifth/ Successful	5 (3.8%)	33 (25.0%)	77 (58.3%)	17 (12.9%)	132
Lowest Fifth/ Successful	28 (12.3%)	99 (43.4%)	101 (44.3%)	0	228
Lowest Fifth/ Level 3	212 (37.6%)	264 (46.8%)	88 (15.6%)	0	564
Total	245 (26.5%)	396 (42.9%)	266 (28.8%)	17 (1.8%)	924

Table 54. Significance Level of Differences Between Elementary School Groups for Indicators in Learning Environment Standard 6 – Professional Growth, Development, and Evaluation.

	All Groups	Lowest Fifth/ Level 3 and Lowest Fifth/ Successful	Lowest Fifth/ Level 3 and Highest Fifth/ Successful	Lowest Fifth/ Successful and Highest Fifth/ Successful
Indicator 6.1.a	0.000	0.007	0.000	
Indicator 6.1.b	0.000	0.031	0.000	
Indicator 6.1.c	0.000	0.001	0.000	
Indicator 6.1.d	0.000	0.000	0.000	0.013
Indicator 6.1.e	0.000	0.010	0.000	0.000
Indicator 6.1.f	0.001	0.019	0.001	
Indicator 6.2.a	0.000	0.009	0.001	0.031
Indicator 6.2.b	0.000	0.001	0.000	
Indicator 6.2.c	0.001		0.001	0.050
Indicator 6.2.d	0.000	0.000	0.000	
Indicator 6.2.e	0.000	0.000	0.002	
Indicator 6.2.f	0.014	0.039	0.013	
Total	12 of 12	11 of 12	12 of 12	4 of 12

Indicator 6.1.a – Evidence of Support for the Long-Term Professional Growth Needs of the Individual Staff Members

Table 55 indicates differences between all three groups of schools, but the only significant differences were found between both groups of Successful schools and Level 3 schools. The difference between the two groups of Successful schools is very noticeable, but it does not reach the level of significance required. As can be seen, the highest fifth/Successful group had almost 65% of its schools in the top two categories, compared to about 37% of the lowest fifth/Successful group and only 6% of the lowest fifth/Level 3 group. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.82, N_2 = 19, M_{rank2} = 45.76, N_3 = 11, M_{rank3} = 58.00) = 18.800, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.01, N_2 = 19, M_{rank2} = 42.13) = 282.50, z = -2.719, p = 0.007$; $U(N_1 = 47, M_{rank1} = 25.81, N_3 = 11, M_{rank3} = 45.27) = 85.00, z = -3.978, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.63, N_3 = 11, M_{rank3} = 18.73) = 69.00, z = -1.690, p = 0.091$.

Table 55. Quintile and Performance Level by Learning Environment Standard 6.1.a

Performance Level	6.1.a – There is evidence of support for the long-term professional growth needs of the individual staff members. This includes both instructional and leadership growth.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		4 (36.4%)	6 (54.5%)	1 (9.1%)	11
Lowest Fifth/Successful	2 (10.5%)	10 (52.6%)	7 (36.8%)		19
Lowest Fifth/Level 3	12 (25.5%)	32 (68.1%)	3 (6.4%)		47
Total	14 (18.2%)	46 (59.7%)	16 (20.8%)	1 (1.3%)	77

Indicator 6.1.b – The School has an Intentional Plan for Building Instructional Capacity Through Ongoing Professional Development

Table 56 shows distinct differences between the three groups. However, only the two groups of Successful schools are significantly different from the Level 3 schools group. Almost 65% of schools in the highest fifth/Successful group were rated in either Category 3 (54.5%) or Category 4 (9.1%), while over 20% of the lowest fifth/Successful group and only 4% of the lowest fifth/Level 3 group received a Category 3 rating. While the highest fifth/Successful group was ranked noticeably higher than the lowest fifth/Successful group, this difference was not large enough to be significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.82, N_2 = 19, M_{rank2} = 45.76, N_3 = 11, M_{rank3} = 58.00) = 18.800, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.63, N_2 = 19, M_{rank2} = 40.61) = 311.50, z = -2.152, p = 0.031$; $U(N_1 = 47, M_{rank1} = 25.81, N_3 = 11, M_{rank3} = 45.27) = 85.00, z = -3.978, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.63, N_3 = 11, M_{rank3} = 18.73) = 69.00, z = -1.690, p = 0.091$.

Table 56. Quintile and Performance Level by Learning Environment Standard 6.1.b

Performance Level	6.1.b – The school has an intentional plan for building instructional capacity through ongoing professional development.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		4 (36.4%)	6 (54.4%)	1 (9.1%)	11
Lowest Fifth/ Successful	4 (21.1%)	11 (57.9%)	4 (21.1%)		19
Lowest Fifth/ Level 3	20 (42.6%)	25 (53.2%)	2 (4.3%)		47
Total	24 (31.2%)	40 (51.9%)	12 (15.6%)	1 (1.3%)	77

Indicator 6.1.c – Staff Development Priorities Are Set in Alignment With Goals for Student Performance and the Individual Growth Plans for Staff

Almost 75% of schools in the highest fifth/Successful group were rated fully functioning and operational (Category 3) on this indicator. Over 42% of schools in the lowest fifth/Successful group had this rating, while just over 10% of the lowest fifth/Level 3 schools received a Category 3 rating. The highest fifth/Successful group's mean rank was noticeably higher but fell just short of being significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.16, N_2 = 19, M_{rank2} = 48.18, N_3 = 11, M_{rank3} = 60.91) = 23.792, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.93, N_2 = 19, M_{rank2} = 44.82) = 231.50, z = -3.280, p = 0.001$; $U(N_1 = 47, M_{rank1} = 25.23, N_3 = 11, M_{rank3} = 47.73) = 58.00, z = -4.263, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.37, N_3 = 11, M_{rank3} = 19.18) = 64.00, z = -1.918, p = 0.055$.

Table 57. Quintile and Performance Level by Learning Environment Standard 6.1.c

Performance Level	6.1.c – Staff development priorities are set in alignment with goals for student performance and the individual growth plans of staff.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		3 (27.3%)	7 (63.6%)	1 (9.1%)	11
Lowest Fifth/ Successful	3 (15.8%)	8 (42.1%)	8 (42.1%)		19
Lowest Fifth/ Level 3	25 (53.2%)	17 (36.2%)	5 (10.6%)		47
Total	28 (36.4%)	28 (36.4%)	20 (26.0%)	1 (1.3%)	77

Indicator 6.1.d – Plans for School Improvement Directly Connect Goals for Student Learning and the Priorities Set for the School and District Staff Development Activities

Each group is significantly different from the other groups. Table 58 shows that over 80% of the schools in the highest fifth/Successful group are rated in Category 3 or Category 4. However, only 37% of the schools in the lowest fifth/Successful group and only 6% of schools in the lowest fifth/Level 3 schools have a rating in Category 3. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 29.71, N_2 = 19, M_{rank2} = 47.97, N_3 = 11, M_{rank3} = 63.18) = 28.500, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.78, N_2 = 19, M_{rank2} = 45.18) = 224.50, z = -3.522, p = 0.000$; $U(N_1 = 47, M_{rank1} = 24.94, N_3 = 11, M_{rank3} = 49.00) = 44.00, z = -4.612, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.79, N_3 = 11, M_{rank3} = 20.18) = 53.00, z = -2.487, p = 0.013$.

Table 58. Quintile and Performance Level by Learning Environment Standard 6.1.d

Performance Level	6.1.d – Plans for school improvement directly connect goals for student learning and the priorities set for the school and district staff development activities.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	8 (72.7%)	1 (9.1%)	11
Lowest Fifth/Successful	1 (5.3%)	11 (57.9%)	7 (36.8%)		19
Lowest Fifth/Level 3	18 (38.3%)	26 (55.3%)	3 (6.4%)		47
Total	19 (24.7%)	39 (50.6%)	18 (23.4%)	1 (1.3%)	77

Indicator 6.1.e – Professional Development is Ongoing and Job-Embedded

Table 59 shows that over 80% of schools in the highest fifth/Successful group have professional development that is ongoing and job embedded. For the lowest fifth/Successful group, approximately 10% of the schools were rated in Category 3, while only 4% of the schools in the lowest fifth/Level 3 group received a Category 3 rating. All differences between the three groups were significant in the direction expected. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.14, N_2 = 19, M_{rank2} = 42.82, N_3 = 11, M_{rank3} = 66.00) = 29.017, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.31, N_2 = 19, M_{rank2} = 41.39) = 296.50, z = -2.570, p = 0.010$; $U(N_1 = 47, M_{rank1} = 24.83, N_3 = 11, M_{rank3} = 49.45) = 39.00, z = -4.770, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.42, N_3 = 11, M_{rank3} = 22.55) = 27.00, z = -3.832, p = 0.000$.

Table 59. Quintile and Performance Level by Learning Environment Standard 6.1.e

Performance Level	6.1.e – Professional development is ongoing and job-embedded.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		2 (18.2%)	7 (63.6%)	2 (18.2%)	11
Lowest Fifth/ Successful	1 (5.3%)	16 (84.2%)	2 (10.5%)		19
Lowest Fifth/ Level 3	17 (36.2%)	28 (59.6%)	2 (4.3%)		47
Total	18 (23.4%)	46 (59.7%)	11 (14.3%)	2 (2.6%)	77

Indicator 6.1.f – Professional Development Planning Shows a Direct Connection to an Analysis of Student Achievement Data

Table 60 shows a difference between all three groups for this indicator. For the highest fifth/Successful group, about 55% of schools were rated in Category 3 or Category 4. Only 26% of schools in the lowest fifth/Successful group and only 4% of the schools in the lowest fifth/Level 3 group were rated in Category 3. Only two comparisons for this indicator are significant—lowest fifth/Successful schools compared to lowest fifth/Level 3 schools and highest fifth/Successful schools compared with lowest fifth/Level 3 schools. The difference between the two Successful groups was not great enough to be considered significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.47, N_2 = 19, M_{rank2} = 44.97, N_3 = 11, M_{rank3} = 56.59) = 14.615, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.34, N_2 = 19, M_{rank2} = 41.32) = 298.00, z = -2.349, p = 0.019$; $U(N_1 = 47, M_{rank1} = 26.13, N_3 = 11, M_{rank3} = 43.91) = 100.00, z = -3.459, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.66, N_3 = 11, M_{rank3} = 18.68) = 69.50, z = -1.627, p = 0.104$.

Table 60. Quintile and Performance Level by Learning Environment Standard 6.1.f

Performance Level	6.1.f – Professional development planning shows a direct connection to an analysis of student achievement data.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	4 (36.4%)	5 (45.5%)	1 (9.1%)	11
Lowest Fifth/ Successful	4 (21.1%)	10 (52.6%)	5 (26.3%)		19
Lowest Fifth/ Level 3	20 (42.6%)	25 (53.2%)	2 (4.3%)		47
Total	25 (32.5%)	39 (50.6%)	12 (15.6%)	1 (1.3%)	77

Indicator 6.2.a – The School/District Provides a Clearly Defined Evaluation Process

At least 50% of schools in each group achieved at least a Category 3 rating for this indicator, as shown in Table 61. The Successful schools had almost all of their schools rated in the upper two categories—100% for the highest fifth group and 84% (16 of 19 schools) for the lowest fifth group. The lowest fifth/Level 3 group had just 51% of its schools rated in Category 3. Differences were significant between each of the groups. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.39, N_2 = 19, M_{rank2} = 45.71, N_3 = 11, M_{rank3} = 55.64) = 16.322, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.10, N_2 = 19, M_{rank2} = 41.92) = 286.50, z = -2.607, p = 0.009$; $U(N_1 = 47, M_{rank1} = 26.30, N_3 = 11, M_{rank3} = 43.18) = 108.00, z = -3.346, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.79, N_3 = 11, M_{rank3} = 18.45) = 72.00, z = -2.157, p = 0.031$.

Table 61. Quintile and Performance Level by Learning Environment Standard 6.2.a

Performance Level	6.2.a – The school/district provides a clearly defined evaluation process.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful			9 (81.8%)	2 (18.2%)	11
Lowest Fifth/ Successful		3 (15.8%)	16 (84.2%)		19
Lowest Fifth/ Level 3	8 (17.0%)	15 (31.9%)	24 (51.1%)		47
Total	8 (10.4%)	18 (23.4%)	49 (63.3%)	2 (2.6%)	77

Indicator 6.2.b – Leadership Provides the Fiscal resources for the Appropriate Professional Growth Plan to Improve Staff Proficiency

Table 62 shows differences between all three groups; however, only two comparisons are significant—both Successful groups with the Level 3 group. While the Level 3 group had only about 25% of its schools rated in Category 3, the successful groups had more than half of their schools receive a rating of Category 3 or higher—91% for the highest fifth group and 68% for the lowest fifth/Successful group. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.61, N_2 = 19, M_{rank2} = 48.61, N_3 = 11, M_{rank3} = 58.27) = 21.259, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.97, N_2 = 19, M_{rank2} = 44.71) = 233.50, z = -3.238, p = 0.001$; $U(N_1 = 47, M_{rank1} = 25.64, N_3 = 11, M_{rank3} = 46.00) = 77.00, z = -3.839, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.89, N_3 = 11, M_{rank3} = 18.27) = 74.00, z = -2.157, p = 0.090$.

Table 62. Quintile and Performance Level by Learning Environment Standard 6.2.b

Performance Level	6.2.b – Leadership provides the fiscal resources for the appropriate professional growth plan to improve staff proficiency.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		1 (9.1%)	9 (81.8%)	1 (9.1%)	11
Lowest Fifth/Successful	1 (5.3%)	5 (26.3%)	13 (68.4%)		19
Lowest Fifth/Level 3	13 (27.7%)	22 (46.8%)	12 (25.5%)		47
Total	14 (18.2%)	28 (36.4%)	34 (44.2%)	1 (1.3%)	77

Indicator 6.2.c – The School/District Effectively Uses the Employee Evaluation and the Individual Professional Growth Plan to Improve Staff Proficiency

Table 63 shows differences between all three groups. While all comparisons are similar, only the two comparisons with the highest fifth/Successful group and the lowest fifth group (Successful as well as Level 3) were at or below the established 0.05 probability criteria. The other comparison was very close to being significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.87, N_2 = 19, M_{rank2} = 43.32, N_3 = 11, M_{rank3} = 57.73) = 13.627, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.84, N_2 = 19, M_{rank2} = 40.08) = 321.50, z = -1.921, p = 0.055$; $U(N_1 = 47, M_{rank1} = 26.03, N_3 = 11, M_{rank3} = 44.32) = 95.50, z = -3.467, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.24, N_3 = 11, M_{rank3} = 19.41) = 61.50, z = -1.957, p = 0.050$.

Table 63. Quintile and Performance Level by Learning Environment Standard 6.1.c

Performance Level	6.1.c – The school/district effectively uses the employee evaluation and the individual professional growth plan to improve staff proficiency.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	3 (27.3%)	5 (45.5%)	2 (18.2%)	11
Lowest Fifth/Successful	5 (26.3%)	8 (42.1%)	6 (31.6%)		19
Lowest Fifth/Level 3	21 (44.7%)	21 (44.7%)	5 (10.6%)		47
Total	27 (35.1%)	32 (41.6%)	16 (20.8%)	2 (2.6%)	77

Indicator 6.2.d – Leadership Provides and Implements a Process of Personnel Evaluations Which Meets or Exceeds Standards Set in Statute and Regulation

For these comparisons, Table 64 shows that the two groups of successful schools have a great deal of similarity. However, both comparisons between the two Successful groups and the Level 3 group were found to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.68, N_2 = 19, M_{rank2} = 49.79, N_3 = 11, M_{rank3} = 55.91) = 21.150, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.65, N_2 = 19, M_{rank2} = 45.50) = 218.50, z = -3.556, p = 0.000$; $U(N_1 = 47, M_{rank1} = 26.03, N_3 = 11, M_{rank3} = 44.32) = 95.50, z = -3.483, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 14.29, N_3 = 11, M_{rank3} = 17.59) = 81.50, z = -1.420, p = 0.156$.

Table 64. Quintile and Performance Level by Learning Environment Standard 6.2.d

Performance Level	6.2.d – Leadership provides and implements a process of personnel evaluations, which meets or exceeds standards set in statute and regulation.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		1 (9.1%)	8 (72.7%)	2 (18.2%)	11
Lowest Fifth/ Successful		3 (15.8%)	16 (84.2%)		19
Lowest Fifth/ Level 3	9 (19.1%)	21 (44.7%)	17 (36.2%)		47
Total	9 (11.7%)	25 (32.5%)	41 (53.2%)	2 (2.6%)	77

Indicator 6.2.e – The School/District Improvement Plan Identifies Specific Instructional Leadership Needs, Has Strategies to Address Them, and Uses the Effective Instructional Leadership Act Requirements as a Resource to Accomplish These Goals

Table 65 shows that more than half of the schools from each group that received audits/reviews were rated in Category 1 or Category 2. Additionally, over 61% of the lowest fifth/Level 3 schools were rated in Category 1, compared to less than 20% for both of the Successful groups. The table also shows that the two groups of Successful schools have a very similar distribution. Comparing the two groups of Successful schools to the group of Level 3 schools shows a distinct difference in the distribution of the ratings. Results of the comparison tests show that both groups of Successful schools had a significantly higher mean rank than did the group of Level 3 schools. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.59, N_2 = 19, M_{rank2} = 52.29, N_3 = 11, M_{rank3} = 52.00) = 19.640, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.10, N_2 = 19, M_{rank2} = 46.87) = 192.50, z = -3.910, p = 0.000$; $U(N_1 = 47, M_{rank1} = 26.49, N_3 = 11, M_{rank3} = 42.36) = 117.00, z = -3.109, p = 0.002$; and $U(N_2 = 19, M_{rank2} = 15.42, N_3 = 11, M_{rank3} = 15.64) = 103.00, z = -0.069, p = 0.945$.

Table 65. Quintile and Performance Level by Learning Environment Standard 6.2.e

Performance Level	6.2.e – The school/district improvement plan identifies specific instructional leadership needs, has strategies to address them, and uses the effective instructional leadership act requirements as a resource to accomplish these goals.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	2 (18.2%)	4 (36.4%)	4 (36.4%)	1 (9.1%)	11
Lowest Fifth/ Successful	3 (15.8%)	7 (36.8%)	9 (47.4%)		19
Lowest Fifth/ Level 3	29 (61.7%)	14 (29.8%)	4 (8.5%)		47
Total	34 (44.2%)	25 (32.5%)	17 (22.1%)	1 (1.3%)	77

Indicator 6.2.f – Leadership Uses the Evaluation Process to Provide Teachers With the Follow-up and Support to Change Behavior and Instructional Practices

School leaders in the Successful groups were significantly more likely to have developed and implemented an evaluation system for teachers to assist them in changing their behaviors and instructional practices. The mean rank of ratings for the Successful groups was significantly higher than the mean rank of the Level 3 group. The difference between the two Successful groups was not significant. Note that less than 50% of schools in either Successful group achieved a Category 3 rating. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.59, N_2 = 19, M_{rank2} = 45.24, N_3 = 11, M_{rank3} = 51.36) = 8.535, p = 0.014$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.60, N_2 = 19, M_{rank2} = 40.68) = 310.00, z = -2.060, p = 0.039$; $U(N_1 = 47, M_{rank1} = 26.99, N_3 = 11, M_{rank3} = 40.23) = 140.50, z = -2.493, p = 0.013$; and $U(N_2 = 19, M_{rank2} = 14.55, N_3 = 11, M_{rank3} = 17.14) = 86.50, z = -0.824, p = 0.410$.

Table 66. Quintile and Performance Level by Learning Environment Standard 6.2.f

Performance Level	6.2.f – Leadership uses the evaluation process to provide teachers with the follow-up and support to change behavior and instructional practices.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	5 (45.5%)	3 (27.3%)	2 (18.2%)	11
Lowest Fifth/ Successful	4 (21.1%)	7 (36.8%)	8 (42.1%)		19
Lowest Fifth/ Level 3	20 (42.6%)	18 (38.3%)	9 (19.1%)		47
Total	25 (32.5%)	30 (39.0%)	20 (26.0%)	2 (2.6%)	77

Efficiency Standard 7 - Leadership

Table 67 and Table 68 show that for Efficiency Standard 7 the mean rank of the two groups of Successful schools are significantly higher than the Level 3 group's mean rank. For the highest fifth/Successful group all 11 mean ranks for indicators are significantly higher than the mean rank for the lowest fifth/Level 3 schools. For the lowest fifth/Successful schools, 10 of the 11 mean ranks for the indicators are significantly higher than the mean rank for the lowest fifth/Level 3 schools group. The highest fifth/Successful group's mean rank still was higher than that of the lowest fifth/Successful group in all 11 indicators but the difference was significant in only 4 of them. From Table 3, recall that the highest fifth/Successful group had more than 50% of its schools rated in Category 3 or 4 in all 11 indicators, the lowest fifth/Successful group had 6 of 11 indicators with over 50% of its schools in these categories, and the lowest fifth/Level 3 schools had only 1 indicator where 50% or more were in Category 3 or 4.

Table 67. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Efficiency Standard 7 – Leadership

Performance Level	Efficiency Standard 7 – Leadership				Total
	1	2	3	4	
Highest Fifth/Successful	11 (9.1%)	26 (21.5%)	60 (49.6%)	24 (19.8%)	121
Lowest Fifth/Successful	21 (10.0%)	101 (48.3%)	86 (41.1%)	1 (0.5%)	209
Lowest Fifth/Level 3	183 (35.4%)	248 (48.0%)	83 (16.1%)	3 (0.6%)	517
Total	215 (25.4%)	375 (44.3%)	229 (27.0%)	28 (3.3%)	847

Table 68. Significance Level of Differences Between Elementary School Groups for Indicators in Efficiency Standard 7 – Leadership.

	All Groups	Lowest Fifth/ Level 3 and Lowest Fifth/ Successful	Lowest Fifth/ Level 3 and Highest Fifth/ Successful	Lowest Fifth/ Successful and Highest Fifth/ Successful
Indicator 7.1.a	0.001	0.008	0.002	
Indicator 7.1.b	0.001	0.015	0.001	
Indicator 7.1.c	0.001	0.008	0.001	
Indicator 7.1.d	0.001	0.001	0.004	
Indicator 7.1.e	0.000	0.001	0.001	
Indicator 7.1.f	0.005		0.002	0.026
Indicator 7.1.g	0.000	0.001	0.000	
Indicator 7.1.h	0.000	0.018	0.000	0.011
Indicator 7.1.i	0.002	0.045	0.001	
Indicator 7.1.j	0.000	0.016	0.000	
Indicator 7.1.k	0.000	0.002	0.000	0.035
Total	11 of 11	10 of 11	11 of 11	3 of 11

Indicator 7.1.a - Leadership Has Developed and Sustained a Shared Vision

Table 69 shows a distinct difference between both Successful schools groups and the Level 3 schools group in the distribution of ratings. Statistical tests comparing the Successful schools groups to the Level 3 schools group verify that these differences were significant. Almost 55% of schools in the highest fifth/Successful group were rated in Category 3 or 4, while just over 25% of the lowest fifth/Successful schools were rated in these categories. Even more disturbing is the fact that the lowest fifth/Level 3 group had almost 50% of its schools rated in the lowest category showing little or no progress for this indicator. While there are observed differences between the two groups of Successful schools, the differences are not enough to be significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.29, N_2 = 19, M_{rank2} = 46.47, N_3 = 11, M_{rank3} = 54.77) = 13.552, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.84, N_2 = 19, M_{rank2} = 42.55) = 274.50, z = -2.634, p = 0.008$; $U(N_1 = 47, M_{rank1} = 26.45, N_3 = 11, M_{rank3} = 42.55) = 115.00, z = -3.046, p = 0.002$; and $U(N_2 = 19, M_{rank2} = 13.92, N_3 = 11, M_{rank3} = 18.23) = 74.50, z = -1.434, p = 0.152$.

Table 69. Quintile and Performance Level by Efficiency Standard 7.1.a

Performance Level	7.1.a – Leadership has developed and sustained a shared vision.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	4 (36.4%)	5 (45.5%)	1 (9.1%)	11
Lowest Fifth/Successful	2 (10.5%)	12 (63.2%)	5 (26.3%)		19
Lowest Fifth/Level 3	23 (48.9%)	17 (36.2%)	7 (14.9%)		47
Total	26 (33.8%)	33 (42.9%)	17 (22.1%)	1 (1.3%)	77

Indicator 7.1.b – Leadership Decisions Are Focused on Student Academic Performance and Are Data-Driven and Collaborative

In Table 70, we see a difference in the distribution of ratings for the three groups. There is a significant difference between the two Successful schools groups and the Level 3 group. Almost 75% of the highest fifth/Successful group schools were rated in Category 3 or 4. For the lowest fifth/Level 3 group, about 66% of schools were rated in Category 1 or 2. Statistical tests indicated significant differences between the two groups of Successful schools and the group of Level 3 schools, but the difference between the two groups of Successful schools did not reach the $p = 0.05$ level of significance. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.56, N_2 = 19, M_{rank2} = 44.63, N_3 = 11, M_{rank3} = 56.77) = 15.145, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.37, N_2 = 19, M_{rank2} = 41.24) = 299.50, z = -2.436, p = 0.015$; $U(N_1 = 47, M_{rank1} = 26.19, N_3 = 11, M_{rank3} = 43.64) = 103.00, z = -3.448, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.39, N_3 = 11, M_{rank3} = 19.14) = 64.50, z = -1.881, p = 0.060$.

Table 70. Quintile and Performance Level by Efficiency Standard 7.1.b

Performance Level	7.1.b – Leadership decisions are focused on student academic performance and are data-driven and collaborative.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	2 (18.2%)	6 (54.5%)	2 (18.2%)	11
Lowest Fifth/Successful	1 (5.3%)	11 (57.9%)	7 (36.8%)		19
Lowest Fifth/Level 3	10 (21.3%)	31 (66.0%)	6 (12.8%)		47
Total	12 (15.6%)	44 (57.1%)	19 (24.7%)	2 (2.6%)	77

Indicator 7.1.c – There Is Evidence That All Administrators Have a Growth Plan Focused on the Development of Effective Leadership Skills

Table 71 shows a distinct difference between the Successful groups and the Level 3 group. Over 50% of schools in the Successful groups were rated in Category 3 or 4, while just over 20% of the Level 3 schools achieved this rating. While there is a difference indicated in the table between the two Successful groups, this difference in mean rank was not sufficient to reach the $p = 0.05$ level of significance. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.01, N_2 = 19, M_{rank2} = 46.39, N_3 = 11, M_{rank3} = 56.09) = 14.672, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.78, N_2 = 19, M_{rank2} = 42.71) = 271.50, z = -2.648, p = 0.008$; $U(N_1 = 47, M_{rank1} = 26.23, N_3 = 11, M_{rank3} = 43.45) = 105.00, z = -3.218, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.68, N_3 = 11, M_{rank3} = 18.64) = 70.00, z = -1.613, p = 0.107$.

Table 71. Quintile and Performance Level by Efficiency Standard 7.1.c

Performance Level	7.1.c – There is evidence that all administrators have a growth plan focused on the development of effective leadership skills.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	2 (18.2%)	5 (45.5%)	3 (27.3%)	11
Lowest Fifth/ Successful	2 (10.5%)	7 (36.8%)	10 (52.6%)		19
Lowest Fifth/ Level 3	16 (34.0%)	21 (41.7%)	10 (21.3%)		47
Total	19 (24.7%)	30 (39%)	25 (32.5%)	3 (3.9%)	77

Indicator 7.1.d – There is Evidence that the School/District Leadership Team Disaggregates Data for Use in Meeting the Needs of a Diverse Population, Communicates the Information to School Staff and Incorporates the Data Systematically into the School's Plan

Table 72 indicates that there is a distinct difference in how the schools in the three groups examine and use data to meet the diverse needs of their student populations. The statistical tests indicate that there is a significant difference between the mean rankings for each group when compared to each of the other groups and when compared as a group. The rankings indicate that Successful schools tend to do a significantly better job in analyzing and using the disaggregated data than do the Level 3 schools and that the mean rank for the group of highest fifth/Successful schools is significantly higher than the mean rank for the lowest fifth/Successful schools. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.72, N_2 = 19, M_{rank2} = 49.16, N_3 = 11, M_{rank3} = 52.55) = 14.935, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.10, N_2 = 19, M_{rank2} = 44.39) = 239.50, z = -3.177, p = 0.001$; $U(N_1 = 47, M_{rank1} = 26.63, N_3 = 11, M_{rank3} = 41.77) = 123.50, z = -2.880, p = 0.004$; and $U(N_2 = 19, M_{rank2} = 14.76, N_3 = 11, M_{rank3} = 16.77) = 90.50, z = -0.674, p = 0.500$.

Table 72. Quintile and Performance Level by Efficiency Standard 7.1.d

Performance Level	7.1.d – There is evidence that the school/district leadership team disaggregates data for use in meeting the needs of a diverse population, communicates the information to school staff and incorporates the data systematically into the school’s plan.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	3 (27.3%)	6 (54.5%)	1 (9.1%)	11
Lowest Fifth/ Successful	1 (5.3%)	8 (42.1%)	10 (52.6%)		19
Lowest Fifth/ Level 3	15 (31.9%)	24 (51.1%)	8 (17.0%)		47
Total	17 (22.1%)	35 (45.5%)	24 (31.2%)	1 (1.3%)	77

Indicator 7.1.e – Leadership Ensures All Instructional Staff Has Access to Curriculum Related Materials and the Training Necessary to use Curricular and Data Resources Relating to the Learning Goals for Kentucky Public Schools

Results displayed in Table 73 and results of the statistical tests indicate that the leadership in the schools for both groups of Successful schools do a significantly better job ensuring that the instructional staff has curriculum-related materials and the training necessary to use the resources available than does the leadership at schools in the lowest fifth/Level 3 group. While there is also a difference in the ratings between both groups of Successful schools, this difference did not reach the significance threshold. The ratings show that more than 80% of schools in the highest fifth/Successful group and over 50% of schools in the lowest fifth/Successful group were rated in Category 3 or 4, while just 21% of schools in the lowest fifth/Level 3 group achieved this rating. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.13, N_2 = 19, M_{rank2} = 48.29, N_3 = 11, M_{rank3} = 56.59) = 18.157, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.07, N_2 = 19, M_{rank2} = 44.45) = 238.50, z = -3.190, p = 0.001$; $U(N_1 = 47, M_{rank1} = 26.05, N_3 = 11, M_{rank3} = 44.23) = 96.50, z = -3.412, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.84, N_3 = 11, M_{rank3} = 18.36) = 73.00, z = -1.505, p = 0.132$.

Table 73. Quintile and Performance Level by Efficiency Standard 7.1.e

Performance Level	7.1.e – Leadership ensures all instructional staff has access to curriculum related materials and the training necessary to use curricular and data resources relating to the learning goals for Kentucky public schools.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	1 (9.1%)	7 (63.6%)	2 (18.2%)	11
Lowest Fifth/Successful		9 (47.4%)	9 (47.4%)	1 (5.3%)	19
Lowest Fifth/Level 3	14 (29.8%)	23 (48.9%)	10 (21.3%)		47
Total	15 (19.5%)	33 (42.9%)	26 (33.8)	3 (3.9%)	77

Indicator 7.1.f – Leadership Ensures that Time is Protected and Allocated to Focus on Curricular and Instructional Issues

Ratings in Table 74 and statistical tests indicate that the highest fifth/Successful group had a significantly higher mean rank than both lowest fifth groups. This is an indicator that leaders in the highest fifth/Successful group tend to do a better job of protecting and allocating time than leaders in the other two groups. Comparison of the mean rank between the Successful and Level 3 schools indicated that, while there was a difference, the differences did not reach the $p = 0.05$ level of significance. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.96, N_2 = 19, M_{rank2} = 41.08, N_3 = 11, M_{rank3} = 56.95) = 10.766, p = 0.005$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 31.63, N_2 = 19, M_{rank2} = 38.13) = 358.50, z = -1.329, p = 0.184$; $U(N_1 = 47, M_{rank1} = 26.33, N_3 = 11, M_{rank3} = 43.05) = 109.50, z = -3.117, p = 0.002$; and $U(N_2 = 19, M_{rank2} = 12.95, N_3 = 11, M_{rank3} = 19.91) = 56.00, z = -2.222, p = 0.026$.

Table 74. Quintile and Performance Level by Efficiency Standard 7.1.f

Performance Level	7.1.f – Leadership ensures that time is protected and allocated to focus on curricular and instructional issues.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	2 (18.2%)	6 (54.5%)	2 (18.2%)	11
Lowest Fifth/Successful	4 (21.1%)	9 (47.4%)	6 (31.6%)		19
Lowest Fifth/Level 3	19 (40.4%)	17 (36.2%)	11 (23.4%)		47
Total	24 (31.2%)	28 (36.4%)	23 (29.9%)	2 (2.6%)	77

Indicator 7.1.g – Leadership Plans and Allocates Resources, Monitors Progress, Provides Organizational Infrastructure, and Removes Barriers in Order to Sustain Continuous School Improvement

The results displayed in Table 75 and the results of the statistical tests comparing the mean ranks for the ratings provide evidence that leadership at Successful schools do a better job of planning and allocating resources, monitoring progress, provide organizational infrastructure and removing barriers in order to sustain continuous school improvement. The Mann-Whitney tests indicated that there were significant differences between the mean rankings between both groups of Successful schools and the group of Level 3 schools. While there were also differences between the mean rankings of the two groups of Successful schools, this difference did not reach the $p = 0.05$ level of significance. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.96, N_2 = 19, M_{rank2} = 48.79, N_3 = 11, M_{rank3} = 57.73) = 20.678, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.78, N_2 = 19, M_{rank2} = 45.18) = 224.50, z = -3.443, p = 0.001$; $U(N_1 = 47, M_{rank1} = 25.88, N_3 = 11, M_{rank3} = 44.95) = 88.50, z = -3.604, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.61, N_3 = 11, M_{rank3} = 18.77) = 68.50, z = -1.753, p = 0.080$.

Table 75. Quintile and Performance Level by Efficiency Standard 7.1.g

Performance Level	7.1.g – Leadership plans and allocates resources, monitors progress, provides organizational infrastructure, and removes barriers in order to sustain continuous school improvement.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	1 (9.1%)	7 (63.6%)	2 (18.2%)	11
Lowest Fifth/ Successful		9 (47.4%)	10 (52.6%)		19
Lowest Fifth/ Level 3	14 (29.8%)	25 (53.2%)	8 (17.0%)		47
Total	15 (19.5%)	35 (45.5%)	25 (32.5%)	2 (2.6%)	77

Indicator 7.1.h – The School/District Leadership Provides the Organizational Policy and Resource Infrastructure Necessary for the Implementation and Maintenance of a Safe and Effective Learning Environment

The results in Table 76 illustrate the differences in the ratings between the three groups. The results of the statistical comparisons of the mean ranks of the ratings indicate that there are significant differences between the mean ranks for all comparisons that were conducted. The results in the table show that over 80% of schools in the highest fifth/Successful group were rated in Category 3 (54.5%) or Category 4, with 36% of the schools receiving an exemplary rating. For the lowest fifth/Successful group, 58% of schools were rated in Category 3, with the remaining schools rated in Category 2. For the lowest fifth/Level 3 schools, about 30% were in Category 3 or 4—one school (2%) achieved an exemplary rating—with the other schools receiving a Category 2 rating (53%) or a Category 1 rating (17%). Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.18, N_2 = 19, M_{rank2} = 44.24, N_3 = 11, M_{rank3} = 59.09)$

= 16.596, $p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.27, N_2 = 19, M_{rank2} = 41.50) = 294.50, z = -2.370, p = 0.018$; $U(N_1 = 47, M_{rank1} = 25.91, N_3 = 11, M_{rank3} = 44.82) = 90.00, z = -3.561, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.74, N_3 = 11, M_{rank3} = 20.27) = 52.00, z = -2.530, p = 0.011$.

Table 76. Quintile and Performance Level by Efficiency Standard 7.1.h

Performance Level	7.1.h – The school/district leadership provides the organizational policy and resource infrastructure necessary for the implementation and maintenance of a safe and effective learning environment.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)		6 (54.5%)	4 (36.4%)	11
Lowest Fifth/ Successful		8 (42.1%)	11 (57.9%)		19
Lowest Fifth/ Level 3	8 (17.0%)	25 (53.2%)	13 (27.7%)	1 (2.1%)	47
Total	9 (11.7%)	33 (42.9%)	30 (39.0%)	5 (6.5%)	77

Indicator 7.1.i – Leadership Provides a Process for the Development and the Implementation of Council Policy Based on Anticipated Needs

Table 77 shows that the majority of schools in each group received a rating of Category 1 or 2. Only 36% of the highest level/Successful schools, 21% of lowest fifth/Successful schools, and 4% of lowest fifth/Level 3 schools were able to achieve a rating of Category 3 or 4. Both groups of Successful schools achieved ratings that resulted in their mean rankings to be significantly higher than the schools in the lowest fifth/Level 3 group. The difference in the mean rank of the ratings did not reach the $p = 0.05$ level of significance for the comparison between the two groups of Successful schools, but the mean rank for the highest fifth of schools was higher than that of the lowest fifth schools. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 33.10, N_2 = 19, M_{rank2} = 43.95, N_3 = 11, M_{rank3} = 55.68) = 12.383, p = 0.002$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.79, N_2 = 19, M_{rank2} = 40.21) = 319.00, z = -2.005, p = 0.045$; $U(N_1 = 47, M_{rank1} = 26.31, N_3 = 11, M_{rank3} = 43.14) = 108.50, z = -3.286, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 13.74, N_3 = 11, M_{rank3} = 18.55) = 71.00, z = -1.559, p = 0.119$.

Table 77. Quintile and Performance Level by Efficiency Standard 7.1.i

Performance Level	7.1.i – Leadership provides a process for the development and the implementation of council policy based on anticipated needs.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	6 (54.5%)	2 (18.2%)	2 (18.2%)	11
Lowest Fifth/ Successful	6 (31.6%)	9 (47.4%)	4 (21.1%)		19
Lowest Fifth/ Level 3	25 (53.2%)	20 (42.6%)	2 (4.3%)		47
Total	32 (41.6%)	35 (45.5%)	8 (10.4%)	2 (2.6%)	77

Indicator 7.1.j – There Is Evidence that the SBDM Council Has an Intentional Focus on Student Academic Performance

Table 78 shows the distribution of ratings for schools in each group. The mean rank for ratings for both groups of Successful schools was significantly higher than the mean rank for the ratings for the Level 3 group. Although the mean rank was higher for the highest fifth/Successful group compared to the lowest fifth/Successful group, this difference did not reach the $p = 0.05$ level of significance. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.12, N_2 = 19, M_{rank2} = 45.00, N_3 = 11, M_{rank3} = 58.05) = 16.183, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.22, N_2 = 19, M_{rank2} = 41.61) = 292.50, z = -2.408, p = 0.016$; $U(N_1 = 47, M_{rank1} = 25.89, N_3 = 11, M_{rank3} = 44.91) = 89.00, z = -3.670, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.39, N_3 = 11, M_{rank3} = 19.14) = 64.50, z = -1.831, p = 0.067$.

Table 78. Quintile and Performance Level by Efficiency Standard 7.1.j

Performance Level	7.1.j – There is evidence that the SBDM Council Has an Intentional Focus on Student Academic Performance.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	4 (36.4%)	4 (36.4%)	2 (18.2%)	11
Lowest Fifth/ Successful	5 (26.3%)	9 (47.4%)	5 (26.3%)		19
Lowest Fifth/ Level 3	24 (51.1%)	21 (44.7%)	2 (4.3%)		47
Total	30 (39.0%)	34 (44.2%)	11 (14.3%)	2 (2.6%)	77

Indicator 7.1.k – There is Evidence That the Principal Demonstrates Leadership Skills in the Areas of Academic Performance, Learning Environment, and Efficiency

The results of the audits/reviews provide evidence that there is a difference in the leadership skills demonstrated by principals from schools in the three groups. The mean ranks for the ratings were significantly different for the three groups. The highest fifth/Successful group had a higher mean rank than both of the other groups, while the lowest fifth/Successful group had a higher mean rank than that of the lowest fifth/Level 3 group. Over 80% of the schools in the highest fifth/Successful group achieved a rating of Category 3 or higher, compared with 47% for the lowest fifth/Successful group, and only 17% of the lowest fifth/Level 3 group. The ratings for schools in the groups are shown in Table 79. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.18, N_2 = 19, M_{rank2} = 47.26, N_3 = 11, M_{rank3} = 58.14) = 18.686, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 29.21, N_2 = 19, M_{rank2} = 44.11) = 245.00, z = -3.114, p = 0.002$; $U(N_1 = 47, M_{rank1} = 25.97, N_3 = 11, M_{rank3} = 44.59) = 92.50, z = -3.491, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.16, N_3 = 11, M_{rank3} = 19.55) = 60.00, z = -2.108, p = 0.035$.

Table 79. Quintile and Performance Level by Efficiency Standard 7.1.k

Performance Level	7.1.k – There is evidence that the principal demonstrates leadership skills in the areas of academic performance, learning environment, and efficiency.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful	1 (9.1%)	1 (9.1%)	6 (54.5%)	3 (27.3%)	11
Lowest Fifth/Successful		10 (52.6%)	9 (47.4%)		19
Lowest Fifth/Level 3	15 (31.9%)	24 (51.1%)	6 (12.8%)	2 (4.3%)	47
Total	16 (20.8%)	35 (45.5%)	21 (27.3%)	5 (6.5%)	77

Efficiency Standard 8 – Organizational Structure and Resources

Table 80 and Table 81 show a distinct difference between the highest fifth/Successful group and the lowest fifth/Level 3 group. However, these tables also show a distinct difference between the highest fifth/Successful schools and the lowest fifth/Successful schools in the areas of school organization and structure—significantly different in 6 of 6 indicators, but a similarity on many indicators dealing with resources—significantly different in only 1 of 4 indicators. We see a difference between the lowest fifth/Successful group and the lowest fifth/Level 3 group in the area of resources—significantly different in 4 of 4 indicators, but not as much of a difference in organizational structure—significantly different in only 2 of 6 indicators.

Table 80. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Efficiency Standard 8 – Organizational Structure and Resources

Performance Level	Efficiency Standard 8 – Organizational Structure and Resources				Total
	1	2	3	4	
Highest Fifth/ Successful	0	27 (24.5%)	67 (60.9%)	16 (14.5%)	110
Lowest Fifth/ Successful	22 (11.6%)	92 (48.4%)	76 (40.0%)	0	190
Lowest Fifth/ Level 3	181 (38.5%)	212 (45.1%)	77 (16.4%)	0	470
Total	203 (26.4%)	331 (43.0%)	220 (28.6%)	16 (2.1%)	770

Table 81. Significance Level of Differences Between Elementary School Groups for Indicators in Efficiency Standard 8 – Organization Structure, and Resources.

	All Groups	Lowest Fifth/ Level 3 and Lowest Fifth/ Successful	Lowest Fifth/ Level 3 and Highest Fifth/ Successful	Lowest Fifth/ Successful and Highest Fifth/ Successful
Indicator 8.1.a	0.000		0.000	0.001
Indicator 8.1.b	0.001		0.000	0.003
Indicator 8.1.c	0.000	0.000	0.000	0.001
Indicator 8.1.d	0.000		0.000	0.002
Indicator 8.1.e	0.005		0.002	0.038
Indicator 8.1.f	0.000	0.031	0.000	0.002
Indicator 8.2.a	0.000	0.000	0.000	
Indicator 8.2.b	0.000	0.002	0.000	0.006
Indicator 8.2.c	0.000	0.000	0.000	
Indicator 8.2.d	0.001	0.001	0.009	
Total	10 of 10	6 of 10	10 of 10	7 of 10

Indicator 8.1.a – There is Evidence that the School is Organized to Maximize Use of all Available Resources to Support High Student and Staff Performance

Table 82 shows a distinct difference in the distribution of ratings between each group. The highest fifth/Successful group had more than 80% of its schools receiving a rating of

Category 3 (73%) or Category 4 (9%), while the lowest fifth/Successful group had just over 20% of its schools in Category 3 and the lowest fifth/Level 3 group had only 6% of its schools receiving a rating in Category 3. Both of the lowest fifth groups had about 60% of their schools receiving a rating of Category 2; however, the Successful schools had a higher percentage of schools in Category 3 (21% to 6%) and a lower percentage of schools in Category 1 (15% to 34%). The difference in these two groups of schools was just above the $p = 0.05$ significance level. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.94, N_2 = 19, M_{rank2} = 41.68, N_3 = 11, M_{rank3} = 64.55) = 23.670, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.96, N_2 = 19, M_{rank2} = 39.79) = 327.00, z = -1.951, p = 0.051$; $U(N_1 = 47, M_{rank1} = 24.98, N_3 = 11, M_{rank3} = 48.82) = 46.00, z = -4.615, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 11.89, N_3 = 11, M_{rank3} = 21.72) = 36.00, z = -3.228, p = 0.001$.

Table 82. Quintile and Performance Level by Efficiency Standard 8.1.a

Performance Level	8.1.a – There is evidence that the school is organized to maximize use of all available resources to support high student and staff performance.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	8 (72.7%)	1 (9.1%)	11
Lowest Fifth/Successful	3 (15.3%)	12 (63.2%)	4 (21.1%)		19
Lowest Fifth/Level 3	16 (34.0%)	28 (59.6%)	3 (6.4%)		47
Total	19 (24.7%)	42 (54.5%)	15 (19.5%)	1 (1.3%)	77

Indicator 8.1.b – The Master Class Schedule Reflects all Students Have Access to all of the Curriculum

Table 83 shows that the highest fifth/Successful schools had a far higher percentage of schools that received a rating of Category 3 or 4 than did either of the other two groups. The table also shows that the other two groups received similar ratings, although the mode for the Successful group was in Category 2 and the mode for the Level 3 group was in Category 1. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.17, N_2 = 19, M_{rank2} = 38.79, N_3 = 11, M_{rank3} = 60.00) = 13.384, p = 0.001$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 32.22, N_2 = 19, M_{rank2} = 36.66) = 386.50, z = -0.911, p = 0.362$; $U(N_1 = 47, M_{rank1} = 25.95, N_3 = 11, M_{rank3} = 44.68) = 91.50, z = -3.494, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.13, N_3 = 11, M_{rank3} = 21.32) = 40.50, z = -2.971, p = 0.003$.

Table 83. Quintile and Performance Level by Efficiency Standard 8.1.b

Performance Level	8.1.b – The master class schedule reflects all students have access to all of the curriculum.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		3 (27.3%)	6 (54.5%)	2 (18.2%)	11
Lowest Fifth/ Successful	4 (21.1%)	11 (57.9%)	4 (21.1%)		19
Lowest Fifth/ Level 3	19 (40.4%)	17 (36.2%)	11 (23.4%)		47
Total	23 (29.9%)	31 (40.3%)	21 (27.3%)	2 (2.6%)	77

Indicator 8.1.c – The Instructional and Non-instructional Staff are Allocated and Organized Based Upon the Learning Needs of all Students

Table 84 shows a distinct difference between each group. The highest fifth/Successful schools have 100% of their schools receiving a rating of Category 3 (73%) or Category 4 (27%), while the lowest fifth/Successful group had 53% of its schools in Category 3 and the lowest fifth/Level 3 schools had only 13% of its schools in this category. The statistical tests comparing the mean rank of the ratings for the groups showed that each group was significantly different from the other groups. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 29.36, N_2 = 19, M_{rank2} = 47.11, N_3 = 11, M_{rank3} = 66.18) = 33.596, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 28.85, N_2 = 19, M_{rank2} = 45.00) = 228.00, z = -3.588, p = 0.000$; $U(N_1 = 47, M_{rank1} = 24.51, N_3 = 11, M_{rank3} = 50.82) = 24.00, z = -5.154, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.11, N_3 = 11, M_{rank3} = 21.36) = 40.00, z = -3.191, p = 0.001$.

Table 84. Quintile and Performance Level by Efficiency Standard 8.1.c

Performance Level	8.1.c – The Instructional and non-instructional staff are allocated and organized based upon the learning needs of all students.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful			8 (72.7%)	3 (27.3%)	11
Lowest Fifth/ Successful		9 (47.4%)	10 (52.6%)		19
Lowest Fifth/ Level 3	9 (19.1%)	32 (68.1%)	6 (12.8%)		47
Total	9 (11.7%)	41 (53.2%)	24 (31.2%)	3 (3.9%)	77

Indicator 8.1.d – There is Evidence that the Staff Makes Efficient Use of Instructional Time to Maximize Student Learning

Table 85 shows a distinct difference between each of the three groups. The highest fifth/Successful group has over 80% of its schools in Category 4 (18%) and Category 3 (64%), while the lowest fifth/Successful group has only 26% and the lowest fifth/Level 3 schools has 19% in Category 3. The major difference between the lowest fifth/Successful group and the lowest fifth/Level 3 group is in Category 2, where the Successful group has 63% of its schools compared to only 40% of the Level 3 schools. All differences in the mean rank of the ratings for the three groups is significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.26, N_2 = 19, M_{rank2} = 42.26, N_3 = 11, M_{rank3} = 62.18) = 18.717, p = 0.000$. Results of the Mann-Whitney test were $U(N_1 = 47, M_{rank1} = 30.80, N_2 = 19, M_{rank2} = 40.18) = 319.50, z = -1.945, p = 0.052$; $U(N_1 = 47, M_{rank1} = 25.46, N_3 = 11, M_{rank3} = 46.77) = 68.50, z = -3.980, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.08, N_3 = 11, M_{rank3} = 21.41) = 39.50, z = -3.062, p = 0.002$.

Table 85. Quintile and Performance Level by Efficiency Standard 8.1.d

Performance Level	8.1.d – There is evidence that the staff makes efficient use of instructional time to maximize student learning.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		2 (18.2%)	7 (63.6%)	2 (18.2%)	11
Lowest Fifth/Successful	2 (10.5%)	12 (63.2%)	5 (26.3%)		19
Lowest Fifth/Level 3	19 (40.4%)	19 (40.4%)	9 (19.1%)		47
Total	21 (27.3%)	33 (42.9%)	21 (27.3%)	2 (2.6%)	77

Indicator 8.1.e – Staff Promotes Team Planning Vertically and Horizontally Across Content Areas and Grade Configurations that is Focused on the Goals, Objectives, and Strategies in the Improvement Plan

Table 86 shows differences between the ratings distribution, but only the differences in the mean rank of the ratings between the highest fifth/Successful and each of the other two groups was significant. The highest fifth/Successful group has about 65% of its schools receiving a rating of Category 4 (9%) and Category 3 (54%). Both of the other two groups have about 45% of their schools receiving a Category 2 rating; however, the lowest fifth/Successful group has approximately 10% more of its schools receiving a Category 3 rating than did the lowest fifth/Level 3 group (32% to 21%). The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 34.09, N_2 = 19, M_{rank2} = 41.00, N_3 = 11, M_{rank3} = 56.55) = 10.465, p = 0.005$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 31.74, N_2 = 19, M_{rank2} = 37.84) = 364.00, z = -1.253, p = 0.210$; $U(N_1 = 47, M_{rank1} = 26.34, N_3 = 11, M_{rank3} = 43.00) = 110.00, z = -3.134, p = 0.002$; and $U(N_2 = 19, M_{rank2} = 13.16, N_3 = 11, M_{rank3} = 19.55) = 60.00, z = -2.073, p = 0.038$.

Table 86. Quintile and Performance Level by Efficiency Standard 8.1.e

Performance Level	8.1.e – Staff promotes team planning vertically and horizontally across content areas and grade configurations that is focused on the goals, objectives, and strategies in the improvement plan (e.g., common planning time for content area teachers; emphasis on learning time and not seat time, and integrated units).				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		4 (36.4%)	6 (54.5%)	1 (9.1%)	11
Lowest Fifth/Successful	4 (21.1%)	9 (47.4%)	6 (31.6%)		19
Lowest Fifth/Level 3	17 (36.2%)	20 (42.6%)	10 (21.3%)		47
Total	21 (27.3%)	33 (42.9%)	22 (28.6%)	1 (1.3%)	77

Indicator 8.1.f – The Schedule is Intentionally Aligned with the School’s Mission and Designed to Ensure that all Staff Provide Quality Instructional Time

Table 87 shows that the highest fifth/Successful schools group had far more schools receiving a Category 4 (9%) or Category 3 (64%) rating than did the other two groups—16% for the lowest fifth/Successful schools and 8% for the lowest fifth/Level 3 schools. The statistical tests indicated that there were significant differences in the mean rank of the ratings between each of the groups. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.01, N_2 = 19, M_{rank2} = 42.66, N_3 = 11, M_{rank3} = 62.55) = 21.220, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 30.66, N_2 = 19, M_{rank2} = 40.53) = 313.00, z = -2.162, p = 0.031$; $U(N_1 = 47, M_{rank1} = 25.35, N_3 = 11, M_{rank3} = 47.23) = 63.50, z = -4.193, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.13, N_3 = 11, M_{rank3} = 21.32) = 40.50, z = -3.116, p = 0.002$.

Table 87. Quintile and Performance Level by Efficiency Standard 8.1.f

Performance Level	8.1.f – The schedule is intentionally aligned with the school’s mission and designed to ensure that all staff provide quality instructional time (e.g., flex time, organization based on developmental needs of students, interdisciplinary units).				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		3 (27.3%)	7 (63.6%)	1 (9.1%)	11
Lowest Fifth/Successful	2 (10.5%)	14 (73.7%)	3 (15.8%)		19
Lowest Fifth/Level 3	18 (38.3%)	25 (53.2%)	4 (8.5%)		47
Total	20 (26.0%)	42 (54.5%)	14 (18.2%)		77

Indicator 8.2.a – The School/District Provides a Clearly Defined Process to Provide Equitable and Consistent Use of Fiscal Resources

Table 88 shows differences between all three groups, but the largest difference is between the two groups of Successful schools and the Level 3 schools. Both groups of Successful schools have over 60% of their schools receiving at least a Category 3 rating, while only 19% of the Level 3 schools were rated this high. The statistical tests confirm that the two groups of Successful schools have significantly higher mean rank for the ratings than did the Level 3 schools and that the differences between the two groups of Successful schools were not large enough to be significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.37, N_2 = 19, M_{rank2} = 50.55, N_3 = 11, M_{rank3} = 55.91) = 20.838, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 28.46, N_2 = 19, M_{rank2} = 45.97) = 209.50, z = -3.579, p = 0.000$; $U(N_1 = 47, M_{rank1} = 25.91, N_3 = 11, M_{rank3} = 44.82) = 90.00, z = -3.556, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 14.58, N_3 = 11, M_{rank3} = 17.09) = 87.00, z = -0.888, p = 0.375$.

Table 88. Quintile and Performance Level by Efficiency Standard 8.2.a

Performance Level	8.2.a – The school/district provides a clearly defined process (in accordance with the school allocation formula) to provide equitable and consistent use of fiscal resources.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		3 (27.3%)	7 (63.6%)	1 (9.1%)	11
Lowest Fifth/Successful	1 (5.3%)	6 (31.6%)	12 (63.2%)		19
Lowest Fifth/Level 3	17 (36.2%)	21 (44.7%)	9 (19.1%)		47
Total	18 (23.4%)	30 (39.0%)	28 (36.4%)	1 (1.3%)	77

Indicator 8.2.b – The School/District Budget Reflects Decisions Made About Discretionary Funds and Resources are Directed by an Assessment of Need or a Required Plan, all of Which Consider Appropriate Data

Table 89 shows distinct differences in the ratings between the three groups. The highest fifth/Successful schools had a higher mean ranking than the lowest fifth/Successful schools and the lowest level/Level 3 schools. The table also shows that the lowest level/Successful schools had a higher mean rank than did the lowest fifth/Level 3 schools. All differences checked were significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.02, N_2 = 19, M_{rank2} = 46.68, N_3 = 11, M_{rank3} = 64.09) = 26.829, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.18, N_2 = 19, M_{rank2} = 44.18) = 243.50, z = -3.120, p = 0.002$; $U(N_1 = 47, M_{rank1} = 24.84, N_3 = 11, M_{rank3} = 49.41) = 39.50, z = -4.694, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.50, N_3 = 11, M_{rank3} = 20.68) = 47.50, z = -2.747, p = 0.006$.

Table 89. Quintile and Performance Level by Efficiency Standard 8.2.b

Performance Level	8.2.b – The school/district budget reflects decisions made about discretionary funds and resources are directed by an assessment of need or a required plan, all of which consider appropriate data.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		1 (9.1%)	9 (81.8%)	1 (9.1%)	11
Lowest Fifth/ Successful	4 (21.1%)	7 (36.8%)	8 (42.1%)		19
Lowest Fifth/ Level 3	28 (59.6%)	13 (27.7%)	6 (12.8%)		47
Total	32 (41.6%)	21 (27.3%)	23 (29.9%)	1 (1.3%)	77

Indicator 8.2.c – School Council and School Board Analyze Funding and Other Resource Requests to Ensure the Requests are Tied to the School’s Plan and Identified Priority Needs

Table 90 shows distinct differences in the ratings between the three groups. The highest fifth/Successful schools had a higher mean ranking than the lowest fifth/Successful schools and the lowest level/Level 3 schools. The table also shows that the lowest level/Successful schools had a higher mean rank than did the lowest fifth/Level 3 schools. All differences checked were significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 29.48, N_2 = 19, M_{rank2} = 52.05, N_3 = 11, M_{rank3} = 57.14) = 24.775, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 27.82, N_2 = 19, M_{rank2} = 47.55) = 179.50, z = -4.031, p = 0.000$; $U(N_1 = 47, M_{rank1} = 25.66, N_3 = 11, M_{rank3} = 45.91) = 78.00, z = -3.830, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 14.50, N_3 = 11, M_{rank3} = 17.23) = 85.50, z = -0.914, p = 0.360$.

Table 90. Quintile and Performance Level by Efficiency Standard 8.2.c

Performance Level	8.2.c – School council and school board analyze funding and other resource requests to ensure the requests are tied to the school’s plan and identified priority needs.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		4 (36.4%)	5 (45.5%)	2 (18.2%)	11
Lowest Fifth/ Successful	1 (5.3%)	7 (36.8%)	11 (57.9%)		19
Lowest Fifth/ Level 3	26 (55.3%)	13 (27.7%)	8 (17.0%)		47
Total	27 (35.1%)	24 (31.2%)	24 (31.2%)	2 (2.6%)	77

Indicator 8.2.d – State and Federal Program Resources Are Allocated and Integrated to Address Student Needs Identified by the School/District

Table 91 shows that the two Successful groups received very similar ratings. The highest fifth/Successful group had approximately 55% of its schools in Category 3 or 4, while the lowest fifth/Successful group had 68% of its schools in Category 3. The mean rank for the ratings for these two groups was very close, with the highest fifth/Successful group having a slightly higher mean. The differences in the mean rankings for the ratings for the two Successful groups were significantly higher than the means of the Level 3 schools. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.76, N_2 = 19, M_{rank2} = 50.47, N_3 = 11, M_{rank3} = 50.14) = 14.692, p = 0.001$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 28.84, N_2 = 19, M_{rank2} = 45.03) = 227.50, z = -3.345, p = 0.001$; $U(N_1 = 47, M_{rank1} = 26.91, N_3 = 11, M_{rank3} = 40.55) = 137.00, z = -2.615, p = 0.009$; and $U(N_2 = 19, M_{rank2} = 15.45, N_3 = 11, M_{rank3} = 15.59) = 103.50, z = -0.049, p = 0.961$.

Table 91. Quintile and Performance Level by Efficiency Standard 8.2.d

Performance Level	8.2.d – State and Federal Program Resources are allocated and integrated (Safe Schools, Title I, IDEA, FRYSC's, ESS) to address student needs identified by the school/district.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		5 (45.5%)	4 (36.4%)	2 (18.2%)	11
Lowest Fifth/Successful	1 (5.3%)	5 (26.3%)	13 (68.4%)		19
Lowest Fifth/Level 3	12 (25.5%)	24 (51.1%)	11 (23.4%)		47
Total	13 (16.9%)	34 (44.2)	28 (36.4%)	2 (2.5%)	77

Efficiency Standard 9 – Comprehensive and Effective Planning

Table 92 shows that the highest fifth/Successful schools received ratings of Category 3 or Category 4 for about half of the 16 indicators in Efficiency Standard 9. The lowest fifth/Successful schools had a rating of Category 3 (no school received an exemplary rating) in about 40% of the 16 indicators. However, only 7% of the lowest fifth/Level 3 schools received a rating of Category 3 (no schools received an exemplary rating) for indicators in this standard.

Table 93 shows that 16 of 16 indicators are significantly different for both groups of Successful schools when compared to the lowest fifth/Level 3 schools. Only 2 of 16 indicators were significantly different between the two groups of Successful schools. Additionally, for three indicators (highlighted in **Table 93**), the mean average rank for the lowest fifth/Successful schools was actually slightly higher than the mean average rank for the highest fifth/Successful schools. These three indicators were the only indicators in all 88 where the lower scoring schools had a higher average ranking than the schools with a higher academic index. For several other indicators the two groups of successful schools had similar mean rankings.

Table 92. Total Number of Ratings in Each Category by Performance Level and Academic Index Quintile for Efficiency Standard 9 – Comprehensive and Effective Planning

Performance Level	Efficiency Standard 9 – Comprehensive and Effective Planning				Total
	1	2	3	4	
Highest Fifth/ Successful	7 (4.0%)	82 (46.6%)	67 (38.1%)	20 (11.4%)	176
Lowest Fifth/ Successful	33 (10.9%)	152 (50.0%)	119 (39.1%)	0	304
Lowest Fifth/ Level 3	287 (38.2%)	414 (55.1%)	51 (6.8%)	0	752
Total	327 (26.5%)	648 (52.6%)	237 (19.2%)	20 (1.6%)	1232

Table 93. Significance Level of Differences Between Elementary School Groups for Indicators in Efficiency Standard 9 – Comprehensive and Effective Planning

	All Groups	Lowest Fifth/ Level 3 and Lowest Fifth/ Successful	Lowest Fifth/ Level 3 and Highest Fifth/ Successful	Lowest Fifth/ Successful and Highest Fifth/ Successful
Indicator 9.1.a	0.000	0.001	0.000	
Indicator 9.2.a	0.000	0.000	0.000	
Indicator 9.2.b	0.000	0.000	0.001	
Indicator 9.3.a	0.000	0.007	0.000	
Indicator 9.3.b	0.000	0.003	0.000	0.016
Indicator 9.3.c	0.000	0.000	0.000	
Indicator 9.4.a	0.000	0.028	0.001	
Indicator 9.4.b	0.000	0.016	0.000	
Indicator 9.5.a	0.001	0.002	0.005	
Indicator 9.5.b	0.000	0.001	0.002	
Indicator 9.5.c	0.000	0.000	0.006	
Indicator 9.5.d	0.000	0.009	0.000	0.039
Indicator 9.6.a	0.001	0.004	0.003	
Indicator 9.6.b	0.000	0.000	0.003	
Indicator 9.6.c	0.000	0.006	0.000	
Indicator 9.6.d	0.000	0.000	0.011	
Total	16 of 16	16 of 16	16 of 16	2 of 16

Indicator 9.1.a – There is Evidence That a Collaborative Process Was Used to Develop this Vision, Beliefs, Mission, and Goals that Engaged the School Community as a Community of Learners

Table 94 shows that the two groups of Successful schools have similar distributions of ratings across the four categories. Both the highest fifth/Successful group and the lowest fifth/Successful group have significantly higher ratings than the lowest fifth/Level 3 group. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.33, N_2 = 19, M_{rank2} = 49.66, N_3 = 11, M_{rank3} = 57.64) = 22.016, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 28.78, N_2 = 19, M_{rank2} = 45.18) = 224.50, z = -3.427, p = 0.001$; $U(N_1 = 47, M_{rank1} = 25.55, N_3 = 11, M_{rank3} = 46.36) = 73.00, z = -4.041, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 14.47, N_3 = 11, M_{rank3} = 17.27) = 85.00, z = -0.909, p = 0.364$.

Table 94. Quintile and Performance Level by Efficiency Standard 9.1.a

Performance Level	9.1.a – There is evidence that a collaborative process was used to develop this vision, beliefs, mission, and goals that engaged the school community as a community of learners.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		6 (54.5%)	4 (36.4%)	1 (9.1%)	11
Lowest Fifth/Successful	4 (21.1%)	7 (36.8%)	8 (42.1%)		19
Lowest Fifth/Level 3	26 (55.3%)	19 (40.4%)	2 (4.3%)		47
Total	30 (39.0%)	32 (41.6%)	14 (18.2%)	1 (1.3%)	77

Indicator 9.2.a – There is Evidence the School/District Planning Process Involves Collecting, Managing, and Analyzing Data

Table 95 shows that the highest fifth/Successful group and the lowest fifth/Successful group have similar ratings, with the distribution fairly evenly split between Category 2 and 3. The lowest fifth/Level 3 group has distinctly lower ratings than the other two groups. The differences between the mean rank for the ratings for the both Successful groups is significantly higher than the mean rank for the lowest fifth/Level 3 group. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 29.73, N_2 = 19, M_{rank2} = 52.42, N_3 = 11, M_{rank3} = 55.41) = 27.919, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 27.82, N_2 = 19, M_{rank2} = 47.55) = 179.50, z = -4.480, p = 0.000$; $U(N_1 = 47, M_{rank1} = 25.91, N_3 = 11, M_{rank3} = 44.82) = 90.00, z = -3.976, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 14.87, N_3 = 11, M_{rank3} = 16.59) = 92.50, z = -0.587, p = 0.557$.

Table 95. Quintile and Performance Level by Efficiency Standard 9.2.a

Performance Level	9.2.a – There is evidence the school/district planning process involves collecting, managing, and analyzing data.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		5 (45.5%)	5 (45.5%)	1 (9.1%)	11
Lowest Fifth/ Successful		10 (52.6%)	9 (47.4%)		19
Lowest Fifth/ Level 3	13 (27.7%)	33 (70.2%)	1 (2.1%)		47
Total	13 (16.9%)	48 (62.3%)	15 (19.5%)	1 (1.3%)	77

Indicator 9.2.b – The School/District Uses Data for School Improvement Planning

Table 96 shows that the highest fifth/Successful group and the lowest fifth/Successful groups have a similar distribution, with the schools from the two groups clustered fairly equally between Category 2 and 3. The rating for the lowest fifth/Level 3 schools is distinctly lower than the ratings for the two groups of Successful schools. The differences between the two groups of successful schools are significantly higher than the mean rankings for the Level 3 schools. The mean ranks for the two groups of Successful schools are not different enough to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.57, N_2 = 19, M_{rank2} = 49.11, N_3 = 11, M_{rank3} = 53.27) = 19.385, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.06, N_2 = 19, M_{rank2} = 44.47) = 238.00, z = -3.655, p = 0.000$; $U(N_1 = 47, M_{rank1} = 26.51, N_3 = 11, M_{rank3} = 42.27) = 118.00, z = -3.477, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 14.63, N_3 = 11, M_{rank3} = 17.00) = 88.00, z = -0.797, p = 0.426$.

Table 96. Elementary Schools – Quintile and Performance Level by Efficiency Standard 9.2.b

Performance Level	9.2.b – The school/district uses data for school improvement planning.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		5 (45.5%)	4 (36.4%)	2 (18.2%)	11
Lowest Fifth/ Successful		10 (52.6%)	9 (47.4%)		19
Lowest Fifth/ Level 3	7 (14.9%)	36 (76.6%)	4 (8.5%)		47
Total	7 (9.1%)	51 (66.2%)	17 (22.1%)	2 (2.6%)	77

Indicator 9.3.a – School and District Plans Reflect Learning Research and Current Local, State, and National Expectations for Student Learning and are Reviewed by the Planning Team

Table 97 shows that the highest fifth/Successful group and the lowest fifth/Successful group have a similar distribution, with the schools from the two groups clustered fairly equally between Category 2 and 3. The rating for the lowest fifth/Level 3 group is distinctly lower than the ratings for the two groups of Successful schools. The differences between the two groups of successful schools are significantly higher than the mean rankings for the Level 3 schools. The mean ranks for the two groups of Successful schools are not different enough to be significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.76, N_2 = 19, M_{rank2} = 46.50, N_3 = 11, M_{rank3} = 57.00) = 17.209, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.84, N_2 = 19, M_{rank2} = 42.55) = 274.50, z = -2.712, p = 0.007$; $U(N_1 = 47, M_{rank1} = 25.91, N_3 = 11, M_{rank3} = 44.82) = 90.00, z = -3.726, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.95, N_3 = 11, M_{rank3} = 18.18) = 75.00, z = -1.390, p = 0.165$.

Table 97. Quintile and Performance Level by Efficiency Standard 9.3.a

Performance Level	9.3.a – School and district plans reflect learning research and current local, state, and national expectations for student learning and are reviewed by the planning team.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		5 (45.5%)	5 (45.5%)	1 (9.1%)	11
Lowest Fifth/Successful	3 (15.8%)	9 (47.4%)	7 (36.8%)		19
Lowest Fifth/Level 3	17 (36.2%)	27 (57.4%)	3 (6.4%)		47
Total	20 (26.0%)	41 (53.2%)	15 (19.5%)	1 (1.3%)	77

Indicator 9.3.b – The School/District Analyzes Their Students' Unique Learning Needs

Table 97 shows that each group has a different distribution of ratings than either of the other two groups. The mean rank for the highest fifth/Successful group is significantly higher than either of the other two groups. The mean rank for the lowest fifth/Successful group is significantly higher than the lowest fifth/Level 3 group. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.27, N_2 = 19, M_{rank2} = 45.61, N_3 = 11, M_{rank3} = 60.64) = 24.040, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.80, N_2 = 19, M_{rank2} = 42.66) = 272.50, z = -3.014, p = 0.003$; $U(N_1 = 47, M_{rank1} = 25.47, N_3 = 11, M_{rank3} = 46.73) = 69.00, z = -4.307, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 12.95, N_3 = 11, M_{rank3} = 19.91) = 56.00, z = -2.414, p = 0.016$.

Table 98. Quintile and Performance Level by Efficiency Standard 9.3.b

Performance Level	9.3.b – The school/district analyzes their students’ unique learning needs.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		4 (36.4%)	6 (54.5%)	1 (9.1%)	11
Lowest Fifth/ Successful	1 (5.3%)	14 (73.7%)	4 (21.1%)		19
Lowest Fifth/ Level 3	15 (31.9%)	31 (66.0%)	1 (2.1%)		47
Total	16 (20.8%)	49 (63.6%)	11 (14.3%)	1 (1.3%)	77

Indicator 9.3.c – The Desired Results for Student Learning are Defined

Table 99 shows differences between all three groups. However, the differences are more distinct between the two groups of Successful schools and the Level 3 group. About 55% of the highest fifth/Successful schools were rated in Category 3 (36%) or Category 4 (18%), with the lowest fifth/Successful group having about 38% of its schools in Category 3. The lowest fifth/Level 3 group had only 6% of its schools in Category 3. Differences between the two groups of Successful schools were not large enough to be significant, while the differences between both Successful groups and the Level 3 schools group were significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.43, N_2 = 19, M_{rank2} = 49.53, N_3 = 11, M_{rank3} = 57.45) = 22.523, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 28.65, N_2 = 19, M_{rank2} = 45.50) = 218.50, z = -3.595, p = 0.000$; $U(N_1 = 47, M_{rank1} = 25.78, N_3 = 11, M_{rank3} = 45.41) = 83.50, z = -3.822, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 14.03, N_3 = 11, M_{rank3} = 18.05) = 76.50, z = -1.348, p = 0.178$.

Table 99. Quintile and Performance Level by Efficiency Standard 9.3.c

Performance Level	9.3.c – The desired results for student learning are defined.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		5 (45.4%)	4 (36.4%)	2 (18.2%)	11
Lowest Fifth/ Successful	1 (5.3%)	11 (57.9%)	7 (36.8%)		19
Lowest Fifth/ Level 3	19 (40.4%)	25 (53.2%)	3 (6.4%)		47
Total	20 (26.0%)	41 (53.2%)	14 (18.2%)	2 (2.6%)	77

Indicator 9.4.a – Perceived Strengths and Limitations of the School/District Instructional and Organizational Effectiveness are Identified Using the Collected Data

Table 100 shows differences between all groups, but differences are most pronounced between the Successful groups and the Level 3 group. The highest fifth/Successful group has about 36% of its schools in Category 3 and 4 and the lowest fifth/Successful group has about 16% of its schools in Category 3. Only 1 of the 47 (2%) lowest fifth/Level 3 schools achieved this rating. The majority of schools from each group are in Category 2. This is an indication that the audit/review teams found some progress being made for this indicator but that the majority of schools, regardless of score or progress, still had not fully planned and implemented procedures for this indicator. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.97, N_2 = 19, M_{rank2} = 44.68, N_3 = 11, M_{rank3} = 54.95) = 13.382, p = 0.001$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 30.63, N_2 = 19, M_{rank2} = 40.61) = 311.50, z = -2.192, p = 0.028$; $U(N_1 = 47, M_{rank1} = 26.34, N_3 = 11, M_{rank3} = 43.00) = 110.00, z = -3.434, p = 0.001$; and $U(N_2 = 19, M_{rank2} = 14.08, N_3 = 11, M_{rank3} = 17.95) = 77.50, z = -1.301, p = 0.193$.

Table 100. Quintile and Performance Level by Efficiency Standard 9.4.a

Performance Level	9.4.a – Perceived strengths and limitations of the school/district instructional and organizational effectiveness are identified using the collected data.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		7 (63.6%)	3 (27.3%)	1 (9.1%)	11
Lowest Fifth/Successful	4 (21.1%)	10 (52.6%)	5 (26.3%)		19
Lowest Fifth/Level 3	17 (36.2%)	29 (61.7%)	1 (2.1%)		47
Total	21 (27.3%)	46 (59.7%)	9 (11.7%)	1 (1.3%)	77

Indicator 9.4.b – The school/district goals for building and strengthening the capacity of the school/district instructional and organizational effectiveness are defined

Table 101 shows that the highest fifth/Successful group was rated higher than the other two groups, with 55% of its schools receiving a Category 3 or 4 rating. The lowest fifth/Successful group had 37% of its schools in Category 3, while the lowest fifth/Level 3 group had only 2 of 47 schools (4%) achieve a Category 3 rating. This indicates that the Successful schools tend to have a program for building and strengthening the capacity of the school more fully in place than do the Level 3 schools. While there were differences between all three groups, only the differences between the two groups of Successful schools and the Level 3 schools group was large enough to be significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.12, N_2 = 19, M_{rank2} = 45.11, N_3 = 11, M_{rank3} = 57.86) = 16.780, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 30.28, N_2 = 19, M_{rank2} = 41.47) = 295.00, z = -2.408, p = 0.016$; $U(N_1 = 47, M_{rank1} = 25.84, N_3 = 11, M_{rank3} = 45.14) = 86.50, z = -3.871, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.63, N_3 = 11, M_{rank3} = 18.73) = 69.00, z = -1.640, p = 0.101$.

Table 101. Quintile and Performance Level by Efficiency Standard 9.4.b

Performance Level	9.4.b – The school/district goals for building and strengthening the capacity of the school/district instructional and organizational effectiveness are defined.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		5 (45.5%)	4 (36.4%)	2 (18.2%)	11
Lowest Fifth/ Successful	4 (21.1%)	8 (42.1%)	7 (36.8%)		19
Lowest Fifth/ Level 3	16 (34.0%)	29 (61.7%)	2 (4.3%)		47
Total	20 (26.0%)	42 (54.5%)	13 (16.9%)	2 (2.6%)	77

Indicator 9.5.a – The Action Steps for School Improvement are Aligned with the School Improvement Goals and Objectives

Table 102 shows that the two groups of Successful schools achieved a similar distribution of ratings, while the Level 3 schools had more schools in Category 1 and 2. Both groups of Successful schools had more than 50% of their schools rated in Category 3 or 4. Only 19% of the lowest fifth/Level 3 schools achieved a Category 3 rating. Differences between the Successful groups and the Level 3 group were significant. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.04, N_2 = 19, M_{rank2} = 48.84, N_3 = 11, M_{rank3} = 51.73) = 14.377, p = 0.001$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.27, N_2 = 19, M_{rank2} = 43.97) = 247.50, z = -3.133, p = 0.002$; $U(N_1 = 47, M_{rank1} = 26.78, N_3 = 11, M_{rank3} = 41.14) = 130.50, z = -2.814, p = 0.005$; and $U(N_2 = 19, M_{rank2} = 14.87, N_3 = 11, M_{rank3} = 16.59) = 92.50, z = -0.578, p = 0.563$.

Table 102. Quintile and Performance Level by Efficiency Standard 9.5.a

Performance Level	9.5.a – The action steps for school improvement are aligned with the school improvement goals and objectives.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		5 (45.5%)	4 (36.4%)	2 (18.2%)	11
Lowest Fifth/ Successful		9 (47.4%)	10 (52.6%)		19
Lowest Fifth/ Level 3	11 (23.4%)	27 (57.4%)	9 (19.1%)		47
Total	11 (14.3%)	41 (53.2%)	23 (29.9%)	2 (2.6%)	77

Indicator 9.5.b – The Plan Identifies the Resources, Timelines, and Persons Responsible for Carrying out Each Activity

Table 103 shows that almost 60% of schools in the two groups of Successful schools were rated as having fully implemented plans and procedures for this indicator. The lowest fifth/Level 3 schools were not as far along, with only 19% of the schools in the group rated as fully implemented. Differences in the mean rank of the ratings were significant between the lowest fifth/Successful schools and the lowest fifth/Level 3 schools and between the highest fifth/Successful schools and the lowest fifth/Level 3 schools groups. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.76, N_2 = 19, M_{rank2} = 49.18, N_3 = 11, M_{rank3} = 52.36) = 16.024, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.14, N_2 = 19, M_{rank2} = 44.29) = 241.50, z = -3.288, p = 0.001$; $U(N_1 = 47, M_{rank1} = 26.62, N_3 = 11, M_{rank3} = 41.82) = 123.00, z = -3.045, p = 0.002$; and $U(N_2 = 19, M_{rank2} = 14.89, N_3 = 11, M_{rank3} = 16.55) = 93.00, z = -0.570, p = 0.569$.

Table 103. Quintile and Performance Level by Efficiency Standard 9.5.b

Performance Level	9.5.b – The plan identifies the resources, timelines, and persons responsible for carrying out each activity.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		4 (36.4%)	6 (54.5%)	1 (9.1%)	11
Lowest Fifth/Successful		8 (42.1%)	11 (57.9%)		19
Lowest Fifth/Level 3	8 (17.0%)	30 (63.8%)	9 (19.1%)		47
Total	8 (10.4%)	42 (54.5%)	26 (33.8%)	1 (1.3%)	77

Indicator 9.5.c – The Means for Evaluating the Effectiveness of the Improvement Plan are Established

This is one of only three indicators where the mean rank of the ratings for the lowest fifth/Successful schools is higher than the mean rank of the highest fifth/Successful schools. However, the difference is small and was not large enough to be considered significant. Table 104 shows that the ratings for this indicator were not very high—27% of the highest fifth/Successful schools, 32% of the lowest fifth/Successful schools, and only 4% of the lowest fifth/Level 3 schools achieved a rating of Category 3 or 4. However, the differences between mean ranks for the two groups of Successful schools were significantly higher than the mean rank of lowest fifth/Level 3 schools. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.52, N_2 = 19, M_{rank2} = 54.03, N_3 = 11, M_{rank3} = 49.27) = 21.087, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 27.65, N_2 = 19, M_{rank2} = 47.97) = 171.50, z = -4.280, p = 0.000$; $U(N_1 = 47, M_{rank1} = 26.87, N_3 = 11, M_{rank3} = 40.73) = 135.00, z = -2.732, p = 0.006$; and $U(N_2 = 19, M_{rank2} = 16.05, N_3 = 11, M_{rank3} = 14.55) = 94.00, z = -0.517, p = 0.605$.

Table 104. Quintile and Performance Level by Efficiency Standard 9.5.c

Performance Level	9.5.c – The means for evaluating the effectiveness of the improvement plan are established.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	2 (18.2%)	6 (54.5%)	2 (18.2%)	1 (9.1%)	11
Lowest Fifth/ Successful	1 (5.3%)	12 (63.2%)	6 (31.6%)		19
Lowest Fifth/ Level 3	27 (57.4%)	18 (38.3%)	2 (4.3%)		47
Total	30 (39.0%)	36 (46.8%)	10 (13.0%)	1 (1.3%)	77

Indicator 9.5.d – The Improvement Plan is Aligned with the School’s Profile, Beliefs, Mission, Desired Results for Student Learning and Analysis of Instructional and Organizational Effectiveness

Table 105 shows vividly differences between each of the three groups. The highest fifth/Successful schools have 82% achieving at least a Category 3 rating, while only 47% of the lowest fifth/Successful group and only 17% of the lowest fifth/Level 3 group achieved this rating. The differences in the mean ranks of the ratings were significant between each of the three groups. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.38, N_2 = 19, M_{rank2} = 45.79, N_3 = 11, M_{rank3} = 59.82) = 19.243, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.85, N_2 = 19, M_{rank2} = 42.53) = 275.00, z = -2.631, p = 0.009$; $U(N_1 = 47, M_{rank1} = 25.53, N_3 = 11, M_{rank3} = 46.45) = 72.00, z = -3.962, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.26, N_3 = 11, M_{rank3} = 19.36) = 62.00, z = -2.069, p = 0.039$.

Table 105. Quintile and Performance Level by Efficiency Standard 9.5.d

Performance Level	9.5.d – The improvement plan is aligned with the school’s profile, beliefs, mission, desired results for student learning and analysis of instructional and organizational effectiveness.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful		2 (18.2%)	8 (72.7%)	1 (9.1%)	11
Lowest Fifth/ Successful	2 (10.5%)	8 (42.1%)	9 (47.4%)		19
Lowest Fifth/ Level 3	15 (31.9%)	24 (51.1%)	8 (17.0%)		47
Total	17 (22.1%)	24 (44.2%)	25 (32.5%)	1 (1.3%)	77

Indicator 9.6.a – The Plan is Implemented as Developed

Table 106 shows similarities between the two groups of Successful schools for this indicator. The mean rank for the ratings for these two groups was similar—14.97 compared to 16.41. However, from the table, the differences between the lowest fifth/Level 3 schools are obvious. The majority of schools in all three groups achieved a Category 2 rating. The Successful schools had about 36% of the remaining schools achieve a Category 3 rating, compared to only 8% of the Level 3 schools. About 36% of the Level 3 schools were rated in Category 1, compared to no highest fifth/Successful schools and 10% of lowest fifth/Successful schools. The differences between mean ranks of the two groups of Successful schools were significantly higher than the mean ranks for the lowest fifth/Level 3 schools. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 32.21, N_2 = 19, M_{rank2} = 48.24, N_3 = 11, M_{rank3} = 52.05) = 14.045, p = 0.001$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.55, N_2 = 19, M_{rank2} = 43.26) = 261.00, z = -2.920, p = 0.004$; $U(N_1 = 47, M_{rank1} = 26.66, N_3 = 11, M_{rank3} = 41.64) = 125.00, z = -2.981, p = 0.003$; and $U(N_2 = 19, M_{rank2} = 14.97, N_3 = 11, M_{rank3} = 16.41) = 94.50, z = -0.487, p = 0.626$.

Table 106. Quintile and Performance Level by Efficiency Standard 9.6.a

Performance Level	9.6.a – The plan is implemented as developed.				Number of Schools
	1	2	3	4	
Highest Fifth/Successful		7 (63.6%)	3 (27.3%)	1 (9.1%)	11
Lowest Fifth/Successful	2 (10.5%)	10 (52.6%)	7 (36.8%)		19
Lowest Fifth/Level 3	17 (36.2%)	26 (55.3%)	4 (8.5%)		47
Total	19 (24.7%)	43 (55.8%)	14 (18.2%)	1 (1.3%)	77

Indicator 9.6.b – The School Evaluates the Degree to Which it Achieves the Goals and Objectives for Student Learning set by the Plan

This is one of three indicators where the mean rank for the lowest fifth/Successful schools is higher than the mean rank of the highest fifth/Successful schools. However, the difference was not significant. As shown in Table 107, there are distinct differences between the school ratings for the two groups of Successful schools and the group of Level 3 schools. Over 50% of schools in the lowest fifth/Level 3 group were rated in Category 1—little or no progress. Both of the Successful schools groups had 2 schools (18% of the highest fifth/Successful schools and 10% of the lowest fifth/Successful schools) in this category. All three groups of schools had just over 45% of their schools in Category 2. However, the two groups of Successful schools had about 40% of their schools in Category 3 or 4. The differences were significant between both groups of Successful schools and the lowest fifth/Level 3 schools. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 30.21, N_2 = 19, M_{rank2} = 53.97, N_3 = 11, M_{rank3} = 50.68) = 22.293$,

$p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 27.57, N_2 = 19, M_{rank2} = 48.16) = 168.00, z = -4.339, p = 0.000$; $U(N_1 = 47, M_{rank1} = 26.64, N_3 = 11, M_{rank3} = 41.73) = 124.00, z = -2.986, p = 0.003$; and $U(N_2 = 19, M_{rank2} = 15.82, N_3 = 11, M_{rank3} = 14.95) = 98.50, z = -0.280, p = 0.779$.

Table 107. Quintile and Performance Level by Efficiency Standard 9.6.b

Performance Level	9.6.b – The school evaluates the degree to which it achieves the goals and objectives for student learning set by the plan.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	2 (18.2%)	5 (45.5%)	3 (27.3)	1 (9.1%)	11
Lowest Fifth/ Successful	2 (10.5%)	9 (47.4%)	8 (42.1)		19
Lowest Fifth/ Level 3	25 (53.2%)	22 (46.8%)			47
Total	29 (37.7%)	36 (46.8%)	11 (14.3%)	1 (1.3%)	77

Indicator 9.6.c – The School Evaluates the Degree Which it Achieves the Expected Impact on Classroom Practice and Student Performance Specified in the Plan

Table 108 shows differences between all three groups of schools. However, the largest difference seen is with the lowest fifth/Level 3, with 62% of the schools in the group rated in Category 1. Both Successful groups have the largest concentration of schools in Category 2, with just over 45% of each groups' schools in this category. The table shows that no group of schools has a majority of its schools with fully implemented programs for this category. The highest fifth/Successful group has only 45% of its schools rated fully implemented and functioning. The lowest fifth/Successful group has only 21% of its schools in this category. Unfortunately, no schools in the lowest fifth/Level 3 group were found to have a fully implemented and functioning program for this indicator. The difference between the two groups of Successful schools was not large enough to be significant. However, the differences between both groups of Successful schools and the lowest fifth/Level 3 group were significant. The results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.52, N_2 = 19, M_{rank2} = 45.97, N_3 = 11, M_{rank3} = 58.91) = 19.163, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 29.87, N_2 = 19, M_{rank2} = 42.47) = 276.00, z = -2.730, p = 0.006$; $U(N_1 = 47, M_{rank1} = 25.65, N_3 = 11, M_{rank3} = 45.95) = 77.50, z = -4.016, p = 0.000$; and $U(N_2 = 19, M_{rank2} = 13.50, N_3 = 11, M_{rank3} = 18.95) = 66.50, z = -1.756, p = 0.079$.

Table 108. Quintile and Performance Level by Efficiency Standard 9.6.c

Performance Level	9.6.c – The school evaluates the degree to which it achieves the expected impact on classroom practice and student performance specified in the plan.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	1 (9.1%)	5 (45.5%)	4 (36.4%)	1 (9.1%)	11
Lowest Fifth/ Successful	6 (31.6%)	9 (47.4%)	4 (21.1%)		19
Lowest Fifth/ Level 3	29 (61.7%)	18 (38.3%)			47
Total	36 (46.8)	32 (41.6%)	8 (10.4%)	1 (1.3%)	77

Indicator 9.6.d – There is Evidence of Attempts to Sustain the Commitment to Continuous Improvement

This is one of three indicators where the lowest fifth/Successful group had a higher mean rank than did the highest fifth/Successful group. However, the difference was not significant. Table 109 shows that the highest fifth/Successful group had only 27% of its schools rated in Category 3 or 4. For the lowest fifth/Successful group, the audit/review teams found fully functioning programs in about 42% of the schools. However, for the lowest fifth/Level 3 schools, only 4% of schools were found to have fully functioning programs. In fact, 53% of the Level 3 schools received a Category 1 rating. The differences in the mean ranks between the Successful schools groups were significantly higher than the mean rank for the lowest fifth/Level 3 schools. Results of the Kruskal-Wallis test were $\chi^2(2, N = 77, N_1 = 47, M_{rank1} = 31.46, N_2 = 19, M_{rank2} = 52.13, N_3 = 11, M_{rank3} = 48.55) = 16.321, p = 0.000$. Results of the Mann-Whitney tests were $U(N_1 = 47, M_{rank1} = 28.41, N_2 = 19, M_{rank2} = 46.08) = 207.50, z = -3.684, p = 0.000$; $U(N_1 = 47, M_{rank1} = 27.04, N_3 = 11, M_{rank3} = 40.00) = 143.00, z = -2.547, p = 0.011$; and $U(N_2 = 19, M_{rank2} = 16.50, N_3 = 11, M_{rank3} = 14.55) = 94.00, z = -0.488, p = 0.626$.

Table 109. Quintile and Performance Level by Efficiency Standard 9.6.d

Performance Level	9.6.d – There is evidence of attempts to sustain the commitment to continuous improvement.				Number of Schools
	1	2	3	4	
Highest Fifth/ Successful	2 (18.2%)	6 (54.5%)	2 (18.2%)	1 (9.1%)	11
Lowest Fifth/ Successful	3 (15.8%)	8 (42.1%)	8 (42.1%)		19
Lowest Fifth/ Level 3	25 (53.2%)	34 (44.2%)	2 (4.3%)		47
Total	30 (39.0%)	34 (44.2%)	12 (15.6%)	1 (1.3%)	77

Summary and Conclusion

This report shows that data from the audits and reviews conducted prior to June 2003 support the following concepts:

- All schools can improve.
- There are distinct, measurable differences between each of the three school groups
- There are areas where Successful schools, regardless of their academic indices, have similarities.
- There are areas where schools with lower academic indices have similarities regardless of their progress toward meeting their goal.

There are limitations to this study. First, it involved a small sample of schools, especially for the highest fifth/Successful group with only 11 schools. Second, the reliability of the data has not been verified. There were a large number of teams that conducted the audits and the reviews, and team composition—persons employed at the state, region, district, or school level—was different between the audits and the reviews. While all teams received training from KDE, this training was modified from one year to the next.

All Schools Can Improve

Data from the scholastic audits conducted before this academic year (prior to June 2003) indicate that virtually every school needs to make changes to achieve an audit rating of at least Category 3 – Fully functioning and operational level of development and implementation. For example, more than 50% of schools in the lowest fifth/Level 3 group were rated only as a Category 1 or 2 in 87 of 88 (99%) indicators. The lowest fifth/Successful group showed only slight improvement, with more than 50% of its schools rated as a Category 1 or 2 in 69 of 88 (78%) indicators. Even the highest fifth/Successful group had more than 50% of its schools rated not higher than a Category 1 or 2 in 31 of 88 (35%) indicators.

The following 11 indicators are particularly worthy of mention because they are ones where more than 60% of the highest fifth/Successful schools group failed to receive at least a Category 3 rating:

- 1.1.b – The district initiates and facilitates discussions among schools regarding curriculum standards to ensure they are clearly articulated across levels (P-12).
- 1.1.f – There is in place a systematic process for monitoring, evaluating, and reviewing the curriculum.
- 2.1.b – Teachers collaborate in the design of authentic assessment tasks aligned with core content subject matter.
- 2.1.c – Students can articulate the academic expectations in each class and know what is required to be proficient.
- 3.1.g – Teachers examine and discuss student work collaboratively and use this information to inform their practice.

- 7.1.i – Leadership provides a process for the development and the implementation of council policy based on anticipated needs.
- 9.4.a – Perceived strengths and limitations of the school/district instructional and organizational effectiveness are identified using the collected data.
- 9.5.c – The means for evaluating the effectiveness of the improvement plan are established.
- 9.6.a – The plan is implemented as developed.
- 9.6.b – The school evaluates the degree to which it achieves the goals and objectives for student learning set by the plan.
- 9.6.d – There is evidence of attempts to sustain the commitment to continuous improvement.

These indicators represent the areas that are most in the need of improvement for all schools regardless of their academic index or progress. They are pointed out because they are the most dramatic in that all groups were rated as needing to improve and about 60% or more of the highest fifth/Successful schools were rated in Category 2 or below. There are other indicators where the audit/review teams rated more than 60% of schools from the lowest fifth/Level 3 group or the lowest fifth/Successful group in Category 1.

Differences Among the School Groups

There were significant differences between the three groups of schools for 87 of the 88 indicators. This is an initial indication that the indicators are valid measures both for school performance as measured by the academic index and school improvement as measured by a school's progress. This analysis was conducted using only elementary schools from the extremes—highest fifth or lowest fifth, and Successful or Level 3. The sample of schools used for the analysis was small with 11, 19, and 47 schools in the three groups. However, the differences found among these groups were significant despite this small sample and the type of data available. These data support the use of the Standards and Indicators as measures of schools relative academic standing and improvement status.

Successful Schools Differences

There were significant differences in 15 indicators between the two groups of Successful schools and the Level 3 schools that also showed relatively little difference between the two groups of highest fifth and lowest fifth Successful schools. This occurred for the following indicators:

- 2.1.g – Implementation of the state-required Assessment and Accountability Program is coordinated by school and district leadership.
- 6.2.e – The school/district improvement plan identifies specific instructional leadership needs, has strategies to address them, and uses the effective instructional leadership act requirements as a resource to accomplish these goals.
- 6.2.f – Leadership uses the evaluation process to provide teachers with the follow-up and support to change behavior and instructional practices.

- 7.1.d – There is evidence that the school/district leadership team disaggregates data for use in meeting the needs of a diverse population, communicates the information to school staff, and incorporates the data systematically into the school's plan.
- 8.2.a – The school/district provides a clearly defined process (in accordance with the school allocation formula) to provide equitable and consistent use of fiscal resources.
- 8.2.c – School council and school board analyze funding and other resource requests to ensure the requests are tied to the school's plan and identified priority needs.
- 9.1.a – There is evidence that a collaborative process was used to develop this vision, beliefs, mission, and goals that engaged the school community as a community of learners.
- 9.2.a – There is evidence the school/district planning process involves collecting, managing, and analyzing data.
- 9.2.b – The school/district uses data for school improvement planning.
- 9.5.a – The action steps for school improvement are aligned with the school improvement goals and objectives.
- 9.5.b – The plan identifies the resources, timelines, and persons responsible for carrying out each activity.
- 9.5.c – The means for evaluating the effectiveness of the improvement plan are established.
- 9.6.a – The plan is implemented as developed.
- 9.6.b – The school evaluates the degree to which it achieves the goals and objectives for student learning set by the plan.
- 9.6.d – There is evidence of attempts to sustain the commitment to continuous improvement.

We identify these indicators because they may be indicators on which schools can focus for improvement regardless of their academic index. These are the indicators common to the extremes of the Successful schools.

Academic Index Differences

There were 7 indicators for which there were significant differences between the highest fifth/Successful schools group and both of the other schools groups, and very similar ratings between both groups of schools in the lowest fifth. There were other indicators in which there were significant differences between all three groups of schools, but these 7 are highlighted because of the similarities between the lowest fifth schools from both groups. The following indicators are those that meet those two criteria:

- 1.1.a – There is evidence that the curriculum is aligned with *Academic Expectations, Core Content for Assessment, Transformations, and the Program of Studies*.
- 1.1.e – The school curriculum provides specific links to continuing education, life, and career options.
- 2.1.e – Multiple assessments are specifically designed to provide meaningful feedback on student learning for instructional purposes.
- 4.1.c – Teachers hold high expectations for all students academically and behaviorally, and this is evidenced in their practice.
- 4.1.g – Teachers communicate regularly with families about individual students' progress.
- 5.1.c – The school/district provides organizational structures and supports instructional practices to reduce barriers to learning.
- 8.1.b – The master class schedule reflects all students have access to all of the curriculum.

We highlight these indicators because they were the indicators that were the most different between the highest fifth and the lowest fifth, regardless of whether or not a school was improving.

Recommendations

While we found significant differences between the three groups of schools, the importance of the Standards and Indicators lies in their ability to aid a school in improving. We did find that most schools that were audited or reviewed saw their academic index rise over the next two-year period. However, we did not have any data to show that these two events were related. Research should be conducted to examine how schools use the information they receive.

Additional data soon will be available from the audits/reviews conducted during the most recent school year. With the addition of more schools, a more in-depth analysis could be conducted. Additionally, this analysis looked only at the quantitative data that was available. The audits/reviews contain descriptions supporting each rating that could be examined to add depth to this or future analyses.

In Table 2 and the description of data associated with each of the nine standards, we noted what appeared to be differences between the various groups. For example, some standards showed differences between the Successful (highest fifth and lowest fifth) and the Level 3 group (Standards 6, 7, and 9), while other standards showed differences between the highest fifth group and the two groups in the lowest fifth (Successful and Level 3) (Standards 2, 3, 4, and 5). We also noted that within a standard there were groups of indicators (e.g., indicators 8.1.a-f versus 8.2.a-d) which split with ratings differing based on progress (Successful versus Level 3 Assistance) or on academic index quartile. This report did not delve into these apparent differences, but did attempt to note them. Additional research should be conducted that focuses on differences or gaps between high and low performing schools and between improving and assistance schools and actions that schools can take to improve their performance based on this research.

References

The Kentucky Department of Education. (2003). *The scholastic audit: A report on school improvement in Kentucky*. Frankfort: Kentucky Department of Education.

The Kentucky Department of Education. (2003). *School level performance descriptors and glossary for Kentucky's standards and indicators for school improvement*. Frankfort, KY: Kentucky Department of Education.

The Kentucky Department of Education. (2003). *Standards and indicators for school improvement*. Frankfort, KY: Kentucky Department of Education.